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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7:

C07D 213/50, 405/06, 213/80, 213/70, A01N 43/40

A1 \

(11) International Publication Number:

WO 00/39094

4

(43) International Publication Date:

6 July 2000 (06.07.00)

(21) International Application Number:

PCT/EP99/10326

(22) International Filing Date:

22 December 1999 (22.12.99)

(30) Priority Data:

2547/98

23 December 1998 (23.12.98) CH

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- (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(54) Title: SUBSTITUTED PYRIDINE HERBICIDES

(57) Abstract

Compounds of formula (I), in which the substituents are as defined in claim 1 and the agrochemically tolerated salts M^+ and all stereoisomers and tautomers of the compounds of formula (I) are suitable for use as herbicides.

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SUBSTITUTED PYRIDINE HERBICIDES

The present invention relates to novel, herbicidally active pyridine ketones, to their preparation, to compositions comprising these compounds, and to their use for controlling weeds, especially in crops of useful plants, or for inhibiting plant growth.

Herbicidally active pyridine ketones are described, for example, in WO 97/46530. There have now been found novel pyridine ketones which have herbicidal and growth-inhibitory properties.

The present invention therefore relates to compounds of the formula I

in which

p is 0 or 1;

R₅ is C₁-C₆haloalkyl;

 R_2 is hydrogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, vinyl which is substituted by C_1 - C_2 alkoxycarbonyl or phenyl, or is C_2 - C_6 alkynyl, C_2 - C_6 haloalkynyl, ethynyl which is substituted by trimethylsilyl, hydroxyl, C_1 - C_2 alkoxy, C_1 - C_2 alkoxycarbonyl or phenyl, or is C_3 - C_6 allenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkyl which is substituted by halogen, or is C_1 - C_6 alkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 alkynyloxy, C_1 - C_6 haloalkoxy, C_3 - C_6 haloalkenyloxy, cyano- C_1 - C_4 alkoxy, C_1 - C_4 alkoxy- C_1 - C_4 alkoxy, C_1 - C_6 alkylsulfonyl- C_1 - C_4 alkoxycarbonyl- C_1 - C_4 alkoxycarbonyl- C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 alkylsulfonyl, C_1 - C_4 alkoxycarbonyl- C_1 - C_4 alkoxycarbonyl- C_1 - C_4 alkoxycarbonyl- C_1 - C_4 alkoxycarbonyl- C_1 - C_4 alkylsulfonyl, benzyl- $S(O)_{n1}$ -, C_1 - C_6 alkylamino, C_2 - C_6 dialkylamino, C_1 - C_6 alkylaminosulfonyl, di- $(C_1$ - C_6 alkylamino)sulfonyl, benzyloxy, benzyl, phenyl, phenoxy, phenylthio, phenylsulfinyl or phenylsulfonyl, it being possible for the phenylcontaining groups, in turn, to be substituted by C_1 - C_3 alkyl, C_1 - C_3 alkoxy, C_1 -

C₃haloalkoxy, halogen, cyano or nitro or R₂ is OS(O)_{n2}-R₂1, N(R₂3)-S(O)_{n3}-R₂2, cyano, carbamoyl, C₁-C₄alkoxycarbonyl, formyl, halogen, thiocyanato, amino, hydroxy-C₁-C₄alkyl, C_1 - C_4 alkyl, C_1 - C_4 C_6 alkylcarbonyloxy- C_1 - C_4 alkyl, C_1 - C_4 alkoxycarbonyl- C_1 - C_4 alkyl, C_1 - C_4 alkoxycarbonyloxy- C_1 -C4alkyl, C1-C4thiocyanato-C1-C4alkyl, benzoyloxy-C1-C4alkyl, C2-C60xiranyl, C1-C4alkylamino- $C_1-C_4\\alkyl,\ di-(C_1-C_4-alkyl)\\amino-C_1-C_4\\alkyl,\ C_1-C_{12}\\alkyl\\thiocarbonyl-C_1-C_4\\alkyl\ or\ formyl-C_1-C_4\\alkyl\ or\ formyl-C_1-C_4$ C₄alkyl, or R₂ is a five- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic or partially saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, the ring system being bonded to the pyridine ring via a C_1 - C_4 alkylene, -CH=CH-, -C \equiv C-, -CH $_2$ O-, -CH $_2$ N(C_1 - C_4 alkyl)-, -CH $_2$ SO-, or -CH₂SO₂ group and it not being possible for each ring system to contain more than 2 oxygen atoms and not more than 2 sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁-C₆alkyl, C₁-C₆haloalkyl, C₃-C₆alkenyl, C₃-C₆haloalkenyl, C₃-C₆alkynyl, C₃-C₆haloalkynyl, C₁-C₆alkoxy, C₁-C₆haloalkoxy, C₃-C₆alkenyloxy, C₃-C₆alkynyloxy, mercapto, C₁-C₆alkylthio, C₁-C₆haloalkylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C₃-C₆alkynylthio, C₂-C₅alkoxyalkylthio, C₃-C₅acetylalkylthio, C₃-C₆alkoxycarbonylalkylthio, C₂-C₄cyanoalkylthio, C₁-C₆alkylsulfinyl, C₁-C₆haloalkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆haloalkylsulfonyl, aminosulfonyl, C₁-C₂alkylaminosulfonyl, di-(C₁-C₂alkyl)aminosulfonyl, di-(C₁-C₄alkyl)amino, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, and substituents on the nitrogen in the heterocyclic ring being other than halogen; R_3 is hydrogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_2 - C_6 alkynyl, C_2 - C_6 haloalkynyl, C_3 - C_6 cycloalkyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_1 - C_6 alkylthio, C₁-C₆alkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆haloalkylsulfinyl, C_1 - C_6 haloalkylsulfonyl, C_1 - C_6 alkylamino, C_2 - C_6 dialkylamino, C_1 - C_6 alkylaminosulfonyl, C2-C6dialkylaminosulfonyl, phenyl, phenylthio, phenylsulfinyl, phenylsulfonyl or phenoxy, it being possible for phenyl, in turn, to be substituted by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, or R₃ is -N(R₂₃)-S(O)_n-R₂₂, cyano, halogen, amino, C₁-C₄alkoxy-C₁-C₄alkyl or C₁-C₄alkyl-S(O)₀-C₁-C₄alkyl; R₄ is hydrogen, C₁-C₆alkyl, hydroxyl, C₁-C₆alkoxy, C₁-C₆haloalkoxy, C₃-C₆alkenyloxy, C_3 - C_6 haloalkenyloxy, C_3 - C_6 alkynyloxy, C_1 - C_4 alkylcarbonyloxy, C_1 - C_4 alkylsulfonyloxy, tosyloxy, C₁-C₄alkylthio, C₁-C₄alkylsulfinyl, C₁-C₄alkylsulfonyl, C₁-C₄alkylamino. C₁-C₄dialkylamino, C₁-C₄alkoxycarbonyl, C₁-C₄haloalkyl, formyl, cyano, halogen, phenyl or

phenoxy, it being possible for phenyl, in turn, to be substituted by C_1 - C_3 alkyl, C_1 - C_3 haloalkyl, C_1 - C_3 alkoxy, C_1 - C_3 haloalkoxy, halogen, cyano or nitro;

or R₄ is a five to ten-membered monocyclic or R₃-fused bicyclic ring system which can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, the ring system, unless fused, being bonded to the pyridine ring directly or via a C_1 - C_4 alkylene, -CH=CH-, -C=C-, -CH₂O-, -CH₂N(C_1 - C_4 alkyl)-, -CH₂S-, -CH₂SO-, or -CH₂SO₂- group and it not being possible for the ring system to contain more than 2 oxygen atoms and not more than two sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁-C₆alkyl, C₁-C₆haloalkyl, C₂-C₆alkenyl, C₂-C₆haloalkenyl, C_2 - C_6 alkynyl, C_2 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 alkynyloxy, C_1 - C_6 alkylthio, C_1 - C_6 haloalkylthio, C_3 - C_6 alkenylthio, C_3 - C_6 haloalkenylthio, C_3 - C_6 alkynylthio, C_1 - C_4 alkoxy- C_1 - C_2 alkylthio, C_1 - C_4 alkylcarbonyl- C_1 - C_2 alkylthio, C₁-C₄alkoxycarbonyl-C₁-C₂alkylthio, cyano-C₁-C₄alkylthio, C₁-C₆alkylsulfinyl, C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 haloalkylsulfonyl, aminosulfonyl, C₁-C₂alkylaminosulfonyl, di-(C₁-C₂alkyl)aminosulfonyl, di-(C₁-C₄alkyl)amino, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, and substituents on the nitrogen in the heterocyclic ring being other than halogen;

R₂₁ is C₁-C₄alkyl or C₁-C₄haloalkyl;

 R_{22} is C_1 - C_4 alkyl, C_1 - C_4 haloalkyl or di- $(C_1$ - C_4 alkyl)amino;

 R_{23} , R_{24} , R_{25} independently of one another are hydrogen or C_1 - C_4 alkyl; n, n_1 , n_2 , n_3 and n_4 independently of one another are 0, 1 or 2; Q is Q_1

$$\begin{array}{cccc}
& R_{10} & R_6 \\
& & R_7 & (Q_1) \\
& & R_9 & R_8
\end{array}$$

in which

 R_6 , R_7 , R_8 and R_9 independently of one another are hydrogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_1 - C_6 alkoxycarbonyl, C_1 - C_6 alkylcarbonyl, C_1 - C_6 alkyl- $S(O)_{n17}$, C_1 - C_6 alkyl- $S(O)_2$, C_1 - C_6 alkylamino, di- $(C_1$ - C_6 alkyl)amino, hydroxyl, C_1 - C_6 alkoxy, C_3 - C_6 alkynyloxy, hydroxy- C_1 - C_6 alkyl, C_1 - C_4 alkylsulfonyloxy- C_1 - C_6 alkyl,

 $tosyloxy-C_1-C_6alkyl,\ C_1-C_6alkyl,\ C_1-C_6alkyl-S(O)_{n4}-C_1-C_6alkyl,\ cyano-C_1-C_6alkyl,\ cyano-C_1-C_6a$ C₁-C₆alkoxy-C₁-C₆alkoxy, benzyloxy-C₁-C₆alkyl, C₁-C₆alkoxycarbonyl-C₁-C₆alkyl, C_1 - C_6 alkoxycarbonyloxy- C_1 - C_6 alkyl, thiocyanato- C_1 - C_6 alkyl, oxiranyl, C_1 - C_6 alkylamino-C₁-C₆alkyl, di(C₁-C₆alkyl)amino-C₁-C₆alkyl, formyl-C₁-C₆alkyl, C₁-C₆alkyloximo, halogen, cyano, nitro, phenyl or phenyl which is substituted by C1-C4alkyl, C1-C4haloalkyl, C1-C4alkoxy, C₁-C₄haloalkoxy, C₁-C₄alkylcarbonyl, C₁-C₄alkoxycarbonyl, amino, C₁-C₄alkylamino, di- C_1 - C_4 alkylamino, C_1 - C_4 alkyl- $S(O)_{n18}$, C_1 - C_4 alkyl- $S(O)_2O$, C_1 - C_4 haloalkyl- $S(O)_{n5}$, C₁-C₄haloalkyl-S(O)₂O, C₁-C₄alkyl-S(O)₂NH, C₁-C₄alkyl-S(O)_{n19}N(C₁-C₄alkyl)₂, halogen, nitro, COOH or cyano; or adjacent R_6 and R_7 or R_8 and R_9 together are -(CH₂)_m-, C(O)O(CH₂)_{n20}- or $-S(O)_{n21}(CH_2)_{n22}-;$ n_5 , n_{17} , n_{18} , n_{19} and n_{21} independently of one another are 0, 1 or 2; n₂₀ is 2 or 3; n₂₂ is 2, 3 or 4; m is 2, 3, 4, 5, or 6; W is oxygen, $S(O)_{n6}$,- $CR_{11}R_{12}$, $-CR_{63}R_{64}CR_{65}R_{66}$, -C(O)- or $-NR_{13}$; R_{63} , R_{64} , R_{65} and R_{66} independently of one another are hydrogen or C_1 - C_6 alkyl, or R_{65} together with R₇ or R₉ forms a direct bond; n₆ is 0, 1 or 2; R₁₁ is hydrogen, C₁-C₄alkyl, C₁-C₄haloalkyl, C₁-C₄alkoxy-C₁-C₄alkyl, C₁-C₄alkylthio-C₁-C₄alkyl, C₁-C₄alkylthio-C₃-C₆cycloalkyl, C₁-C₄alkycarbonyloxy-C₁-C₄alkyl, C₁-C4alkysulfonyloxy-C1-C4alkyl, tosyloxy-C1-C4alkyl, di-(C1-C3alkoxyalkyl)methyl, di-(C1- C_3 alkthioalkyl)methyl, (C_1 - C_3 alkoxyalkyl)-(C_1 - C_3 alkthioalkyl)methyl, C_3 - C_5 oxacycloalkyl, C_3 -C₅thiacycloalkyl, C₃-C₄dioxacycloalkyl, C₃-C₄dithiacycloalkyl, C₃-C₄oxathiacycloalkyl, formyl, C₁-C₄alkoxycarbonyl, carbamoyl, C₁-C₄alkylaminocarbonyl, di-(C₁-C₄alkyl)aminocarbonyl, phenylaminocarbonyl, benzylaminocarbonyl or phenyl which, in turn, can be substituted by C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, C_1 - C_4 alkylcarbonyl, C₁-C₄alkoxycarbonyl, amino, C₁-C₄alkylamino, di-C₁-C₄alkylamino, C₁-C₄alkyl-S(O)_{n21}, C_1 - C_4 alkyl- $S(O)_2O$, C_1 - C_4 haloalkyl- $S(O)_{n7}$, C_1 - C_4 haloalkyl- $S(O)_2O$, C_1 - C_4 alkyl- $S(O)_2NH$, C₁-C₄alkyl-S(O)_{n20}N(C₁-C₄alkyl), halogen, nitro, COOH or cyano; n_7 , n_{20} and n_{21} independently of one another are 0, 1 or 2: or R₁₂ together with R₆ or R₉ is a group -(CH₂)₀-; o is 1, 2, 3, 4 or 5;

R₁₂ is hydrogen, C₁-C₄alkyl or C₁-C₄haloalkyl;

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or R_{12} together with R_{11} is a group -(CH_2)_{m1}; m_1 is 2, 3, 4, 5, or 6;

R₁₀ is hydroxyl, O⁻M⁺, halogen, cyano, SCN, OCN, C₁-C₁₂alkoxy, C₁-C₄alkoxycarbonyl- C_1 - C_4 alkoxy, C_1 - C_{12} alkylthio, C_1 - C_{12} alkylsulfinyl, C_1 - C_{12} alkylsulfonyl, C_1 - C_{12} haloalkylthio, $C_1-C_{12} haloalkylsulfinyl, \ C_1-C_{12} haloalkylsulfonyl, \ C_1-C_6 alkoxy-C_1-C_6 alkoxy C_6$ alkylsulfinyl, C_1 - C_6 alkoxy- C_1 - C_6 alkylsulfonyl, C_2 - C_{12} alkenylthio, C_2 - C_{12} alkenylsulfinyl, C_2 -C₁₂alkenylsulfonyl, C₂-C₁₂alkynylthio, C₂-C₁₂alkynylsulfinyl, C₂-C₁₂alkynylsulfonyl, C₂-C₁₂haloalkenylthio, C₂-C₁₂haloalkenylsulfinyl, C₂-C₁₂haloalkenylsulfonyl, C₁-C₄alkoxycarbonyl-C₁-C₄alkylthio, C₁-C₄alkoxycarbonyl-C₁-C₄alkylsulfinyl, C₁-C₄alkoxycarbonyl- C_1 - C_4 alkylsulfonyl, $(C_1$ - C_4 alkoxy)₂P(O)O, C_1 - C_4 alkyl- $(C_1$ - C_4 alkoxy)P(O)O, $H(C_1$ - C_4 alkoxy)P(O)O, $R_{14}R_{15}N$, $R_{14}R_{15}NNH$, $R_{16}R_{17}NC(O)O$ -, $R_{16}R_{17}NC(O)NH$ -, C_1 - C_{12} alkyl-S(O)₂NR₁₈, C₁-C₄haloalkyl-S(O)₂NR₁₉, C₁-C₁₂alkyl-S(O)₂O, C₁-C₄haloalkyl-S(O)₂O, C₁-C₁₈alkylcarbonyloxy, it being possible for the alkyl group to be substituted by halogen, C₁- C_6 alkoxy, C_1 - C_6 alkylthio or cyano, or is C_2 - C_{18} alkenylcarbonyloxy, C_2 - C_{18} alkynylcarbonyloxy, C₃-C₆cycloalkylcarbonyloxy, C₁-C₁₂alkoxycarbonyloxy, C₁-C₁₂alkylthiocarbonyloxy, C₁- C_{12} alkylthiocarbamoyl, C_1 - C_6 alkyl-NH(CS)N(C_1 - C_6 alkyl)-NH-, di- C_1 - C_6 alkyl-N(CS)N(C_1 -C₆alkyl)-NH-, benzyloxy, benzylthio, benzylsulfinyl, benzylsulfonyl, phenoxy, phenylthio. phenylsulfinyl, phenylsulfonyl, phenylsulfonylamino, phenylsulfonyloxy or benzoyloxy, it being possible for the phenyl groups, in turn, to be substituted by C₁-C₄alkyl, C₁-C₄haloalkyl, C₁-C₄alkoxy, C₁-C₄haloalkoxy, C₁-C₄alkylcarbonyl, C₁-C₄alkoxycarbonyl, C₁-C₄alkylamino, di-C₁-C₄alkylamino, C₁-C₄alkylthio, C₁-C₄alkylsulfinyl, C₁-C₄alkylsulfonyl, C₁-C₄alkyl-S(O)₂O, C₁-C₄haloalkylthio, C₁-C₄haloalkylsulfinyl, C₁-C₄haloalkylsulfonyl, C₁-C₄haloalkyl-S(O)₂O, C₁-C₄alkyl-S(O)₂NH, C₁-C₄alkyl-S(O)₂N(C₁-C₄alkyl), halogen, nitro or cyano; or R₁₀ is a group Ar₁-thio, Ar₂-sulfinyl, Ar₃-sulfonyl, -OCO-Ar₄ or NH-Ar₅ in which Ar₁, Ar₂, Ar₃, Ar4 and Ar5 independently of one another are a five- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic or partially saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, and it being possible for each ring system to contain not more than 2 oxygen atoms and not more than two sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁-C₆alkyl, C₁-C₆haloalkyl, C₃-C₆alkenyl, C₃-C₆haloalkenyl, C₃-C₆alkynyl, C_3 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 alkynyloxy, mercapto, C₁-C₆alkylthio, C₁-C₆haloalkylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C₃-C₆alkynylthio, C₂-C₅alkoxyalkylthio, C₃-C₅acetylalkylthio, C₃-C₆alkoxycarbonylalkylthio, C₂-C₄cyanoalkylthio, C₁-C₆alkylsulfinyl, C₁-C₆haloalkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆-

haloalkylsulfonyl, aminosulfonyl, C_1 - C_2 alkylaminosulfonyl, di- $(C_1$ - C_2 alkyl)aminosulfonyl, di- $(C_1$ - C_4 alkyl)amino, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C_1 - C_3 alkyl, C_1 - C_3 haloalkyl, C_1 - C_3 alkoxy, C_1 - C_3 haloalkoxy, halogen, cyano or nitro, and where substituents on the nitrogen in the heterocyclic ring are other than halogen;

 R_{14} , R_{15} , R_{16} , R_{17} and R_{18} independently of one another are hydrogen or C_1 - C_6 alkyl; n_8 , n_9 , n_{10} , n_{11} , n_{12} , n_{13} and n_{14} independently of one another are 0, 1 or 2; R_{13} is hydrogen, C_1 - C_4 alkyl, C_1 - C_4 alkythio- C_1 - C_4 carbonyl, C_1 - C_4 alkylsulfinyl- C_1 - C_4 carbonyl, C_1 - C_4 alkylsulfonyl- C_1 - C_4 carbonyl, C_1 - C_4 alkoxycarbonyl, C_1 - C_4 alkylcarbonyl, phenylcarbonyl, or is phenyl which, in turn, can be substituted by C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylcarbonyl, C_1 - C_4 alkoxycarbonyl, C_1 - C_4 alkylamino, di- C_1 - C_4 -alkylamino, C_1 - C_4 alkyl- $S(O)_{n15}$, C_1 - C_4 alkyl- $S(O)_2$ O, C_1 - C_4 haloalkyl- $S(O)_{n16}$, C_1 - C_4 haloalkyl- $S(O)_2$ O, C_1 - C_4 alkyl- $S(O)_2$ NH, C_1 - C_4 alkyl- $S(O)_2$ N(C_1 - C_4 alkyl), halogen, nitro, or cyano; and n_{15} and n_{16} independently of one another are 0, 1 or 2; and the agrochemically tolerated salts M^+ and all stereoisomers and tautomers of the compounds of the formula I.

The alkyl groups in the definitions of the substituents can be straight-chain or branched and are, for example, methyl, ethyl, n-propyl, iso-propyl, n-butyl, sec-butyl, iso-butyl, tert-butyl, pentyl, hexyl, heptyl, octyl, nonyl, decyl, undecyl and dodecyl and their branched isomers. Alkoxy, alkenyl and alkynyl radicals are derived from the abovementioned alkyl radicals. The alkenyl and alkynyl groups can be mono- or polyunsaturated.

An alkylene group for example, $-(CH_2)_{m^-}$, $-(CH_2)_{m^+}$ or $-(CH_2)_{o^-}$ can be substituted by one or more methyl group; preferably, such alkylene groups are in each case unsubstituted. The same also applies to the $-C(O)O(CH_2)_{n20^-}$ and $-S(O)_{n21}(CH_2)_{n22^-}$ group and to all C_3-C_6 -cycloalkyl-, C_3-C_5 oxacycloalkyl-, C_3-C_5 thiacycloalkyl-, C_3-C_4 dioxacycloalkyl-, C_3-C_4 oxathiacycloalkyl-containing groups.

Halogen is, as a rule, fluorine, chlorine, bromine or iodine. This also applies analogously to halogen in conjunction with other meanings such as haloalkyl or halophenyl.

Haloalkyl groups with a chain length of 1 up to 6 carbon atoms are, for example, fluoromethyl, difluoromethyl, trifluoromethyl, chloromethyl, dichloromethyl, trichloromethyl,

2,2,2-trifluoroethyl, 1-fluoroethyl, 2-fluoroethyl, 2-chloroethyl, 2-fluoroprop-2-yl, pentafluoroethyl, 1,1-difluoro-2,2,2-trichloroethyl, 2,2,3,3-tetrafluoroethyl and 2,2,2-trichloroethyl, pentafluoroethyl, heptafluoro-n-propyl, perfluoro-n-hexyl; haloalkyl groups in the meanings R_2 , R_3 and, in particular, R_5 are preferably trichloromethyl, fluoromethyl, dichlorofluoromethyl, difluorochloromethyl, trifluoromethyl, pentafluoroethyl or heptafluoro-n-propyl.

Suitable as haloalkyl are monohalogenated or polyhalogenated alkenyl groups, where halogen is fluorine, chlorine, bromine and iodine, and in particular fluorine and chlorine, for example 1-chlorovinyl, 2-chlorovinyl, 2,2-difluorovinyl, 2,2-difluoroprop-1-en-2-yl, 2,2-dichlorovinyl, 3-fluoroprop-1-enyl, chloroprop-1-en-1-yl, 3-bromoprop-1-en-1-yl, 2,3,3-trifluoroprop-2-en-1-yl, 2,3,3-trifluoroprop-2-en-1-yl and 4,4,4-trifluorobut-2-en-1-yl. Preferred amongst the monohalogenated, dihalogenated or trihalogenated C_2 - C_6 alkenyl groups are those which have a chain length of 2 to 5 carbon atoms.

Suitable as haloalkynyl are, for example, monohalogenated or polyhalogenated alkynyl groups, where halogen is bromine, iodine and, in particular, fluorine and chlorine, for example 3-fluoropropynyl, 3-chloropropynyl, 3-bromopropynyl, 3,3,3-trifluoropropynyl and 4,4,4-trifluorobut-2-yn-1-yl. Preferred amongst the monohalogenated or polyhalogenated alkynyl groups are those which have a chain length of 2 to 5 carbon atoms.

A monohalogenated or polyhalogenated C_3 - C_6 cycloalkyl group is, for example, the 2,2-dichlorocyclopropyl, 2,2-dibromocyclopropyl, 2,2,3,3-tetrafluorocyclobutyl or 2,2-difluoro-3,3-dichlorocyclobutyl group.

Alkoxy groups preferably have a chain length of 1 to 6 carbon atoms. Alkoxy is, for example, methoxy, ethoxy, propoxy, i-propoxy, n-butoxy, iso-butoxy, sec-butoxy and tert-butoxy and the pentyloxy and hexyloxy isomers; preferably methoxy and ethoxy. Alkylcarbonyl is preferably acetyl or propionyl. Alkoxycarbonyl is, for example, methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, iso-propoxycarbonyl, n-butoxycarbonyl, iso-butoxycarbonyl, sec-butoxycarbonyl or tert-butoxycarbonyl; preferably methoxycarbonyl, ethoxycarbonyl or tert-butoxycarbonyl. Haloalkoxy groups preferably have a chain length of 1 to 6 carbon atoms.

Haloalkoxy is, for example, fluoromethoxy, difluoromethoxy, trifluoromethoxy, 2,2,2-trifluoroethoxy, 1,1,2,2-tetrafluoroethoxy, 1-fluoroethoxy, 2-fluoroethoxy, 2-chloroethoxy, 2,2-difluoroethoxy and 2,2,2-trichloroethoxy; preferably fluoromethoxy, difluoromethoxy, 2-chloroethoxy and trifluoromethoxy.

Alkylthio groups preferably have a chain length of 1 to 8 carbon atoms. Alkylthio is, for example, methylthio, ethylthio, propylthio, iso-propylthio, n-butylthio, iso-butylthio, secbutylthio or tert-butylthio, preferably methylthio and ethylthio. Alkylsulfinyl is, for example, methylsulfinyl, ethylsulfinyl, propylsulfinyl, iso-propylsulfinyl, n-butylsulfinyl, iso-butylsulfinyl, sec-butylsulfinyl, tert-butylsulfinyl; preferably methylsulfinyl and ethylsulfinyl.

Alkylsulfonyl is, for example, methylsulfonyl, ethylsulfonyl, propylsulfonyl, iso-propylsulfonyl, n-butylsulfonyl, iso-butylsulfonyl, sec-butylsulfonyl or tert-butylsulfonyl; preferably methylsulfonyl or ethylsulfonyl.

Alkylamino is, for example, methylamino, ethylamino, n-propylamino, iso-propylamino or the butylamino isomers. Dialkylamino is, for example, dimethylamino, methylethylamino, diethylamino, n-propylmethylamino, di-butylamino and di-iso-propylamino. Preferred are alkylamino groups having a chain length of 1 to 4 carbon atoms. Alkoxyalkyl groups preferably have 1 to 6 carbon atoms. Alkoxyalkyl is, for example, methoxymethyl, methoxyethyl, ethoxymethyl, n-propoxymethyl, n-propoxymethyl, iso-propoxymethyl or iso-propoxyethyl. Alkylthioalkyl groups preferably have 1 to 6 carbon atoms. Alkylthioalkyl is, for example, methylthiomethyl, methylthioethyl, ethylthiomethyl, ethylthiomethyl, ethylthiomethyl, iso-propylthiomethyl, butylthiomethyl, n-propylthioethyl, iso-propylthiomethyl, butylthiomethyl, or butylthiobutyl.

Phenyl, also as part of a substituent such as phenoxy, benzyl, benzyloxy, benzoyl, phenylthio, phenylalkyl, phenoxyalkyl or tosyl can be in monosubstituted or polysubstituted form. In this case, the substituents can be in any of the ortho, meta and/or para position(s).

Allenyl is, for example, CH₂=C=CH₂ CH₂=CH-CH₂-CH=CH₂, CH₂=CH-CH₂-CH=CH₂ or CH₂=CH-CH₂-CH=CH₃.

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The invention also extends to the salts M⁺ which the compounds of the formula I, in particular those compounds of the formula I in which R₁₀ is O M⁺, can form, preferably with amines, alkali metal bases, alkaline earth metal bases or quaternary ammonium bases. The following must be emphasized as salt formers amongst the alkali metal bases and alkaline earth metal bases: the hydroxides of lithium, sodium, potassium, magnesium or calcium, in particular those of sodium or potassium. Examples of amines which are suitable for ammonium salt formation are not only ammonia, but also primary, secondary and tertiary C₁-C₁₈alkylamines, C₁-C₄hydroxyalkylamines and C₂-C₄alkoxyalkylamines, for example methylamine, ethylamine, n-propylamine, iso-propylamine, the four butylamine isomers. n-amylamine, iso-amylamine, hexylamine, heptylamine, octylamine, nonylamine, decylamine, pentadecylamine, hexadecylamine, heptadecylamine, octadecylamine, methylethylamine, methylisopropylamine, methylnexylamine, methylne methyloctadecylamine, ethylbutylamine, ethylbetylamine, ethyloctylamine, hexylheptylamine, hexyloctylamine, dimethylamine, diethylamine, di-n-propylamine, di-isopropylamine, di-n-butylamine, di-n-amylamine, di-iso-amylamine, dihexylamine, diheptylamine, dioctylamine, ethanolamine, n-propanolamine, iso-propanolamine, N,Ndiethanolamine, N-ethylpropanolamine, N-butylethanolamine, allylamine, n-butenyl-2-amine, n-pentenyl-2-amine, 2,3-dimethylbutenyl-2-amine, dibutenyl-2-amine, n-hexenyl-2-amine, propylenediamine, trimethylamine, triethylamine, tri-n-propylamine, tri-iso-propylamine, tri-nbutylamine, tri-iso-butylamine, tri-sec-butylamine, tri-n-amylamine, methoxyethylamine and ethoxyethylamine; heterocyclic amines for example, pyridine, quinoline, iso-quinoline, morpholine, piperidine, pyrrolidine, indoline, quinuclidine and azepine; primary arylamines for example anilines, methoxyanilines, ethoxyanilines, o-, m-, p-toluidines, phenylenediamines, naphthylamines and o-, m- and p-chloroanilines; but in particular triethylamine, isopropylamine and di-iso-propylamine. Examples of quaternary ammonium bases which are suitable for salt formation are, for example, [N(RaRbRcRd)]+OH, where Ra, Rb, Rc and Rd independently of one another are C1-C4alkyl. Other suitable tetraalkylammonium bases with other anions can be obtained, for example, by anion exchange reactions. M+ preferably represents an ammonium salt, in particular NH₄⁺, or an alkali metal, in particular potassium or sodium.

The compounds of the formula I can occur in various tautomeric forms, for example, if R_{10} is hydroxyl, in the preferred formulation I' and I''

Preferred among the compounds of the formula I are those in which p is 0;

R₅ is C₁-C₆haloalkyl;

R₂ is hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, C₂-C₆alkenyl, C₂-C₆haloalkenyl, C₂-C₆alkynyl, C_2 - C_6 haloalkynyl, C_3 - C_6 cycloalkyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆haloalkylthio, C₁-C₆haloalkylsulfinyl, C₁-C₆haloalkylsulfonyl, benzyl-S(O)_{n1}-, C₁-C₆alkylamino, C₂-C₆dialkylamino, C₁-C₆alkylaminosulfonyl, C2-C6-dialkylaminosulfonyl, phenyl, phenoxy, phenylthio, phenylsulfinyl or phenylsulfonyl, it being possible for the phenyl group, in turn, to be substituted by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, or is $OS(O)_{n2}-R_{21}$, $N(R_{23})-S(O)_{n3}-R_{22}$, cyano, halogen, amino, C_1-C_4 alkoxy- C_1-C_4 alkyl, C_1-C_4 alkyl- $S(O)_{n4}-C_1-C_4$ alkyl, cyano- C_1-C_4 alkyl or C_1-C_4 alkoxy- C_1-C_4 alkoxy; R₃ is hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, C₂-C₆alkenyl, C₂-C₆haloalkenyl, C₂-C₆alkynyl, C₂-C₆haloalkynyl, C₃-C₆cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkoxy, C₁-C₆alkylthio, C₁-C₆alkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 haloalkylthio, C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 haloalkylsulfonyl, C₁-C₆alkylamino, C₂-C₆dialkylamino, C₁-C₆alkylaminosulfonyl, C₂-C₆dialkylaminosulfonyl, phenyl, phenylthio, phenylsulfinyl, phenylsulfonyl or phenoxy, it being possible for phenyl, in turn, to be substituted by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, or is -N(R₂₃)-S(O)_n-R₂₂, cyano, halogen, amino, C_1 - C_4 alkoxy- C_1 - C_4 alkyl or C_1 - C_4 alkyl- $S(O)_n$ - C_1 - C_4 alkyl;

R₄ is hydrogen, C₁-C₆alkyl, C₁-C₄alkoxy, C₁-C₄haloalkoxy, C₁-C₄alkylcarbonyloxy, C₁-C₄alkylthio, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 haloalkyl, formyl, cyano, halogen, phenyl or phenoxy, it being possible for phenyl, in turn, to be substituted by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro; or R_4 is a five- to ten-membered monocyclic or R_3 -fused bicyclic ring system which can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, the ring system being bonded to the pyridine ring via a C1-C4alkylene group and it not being possible for the ring system to contain more than 2 oxygen atoms and not more than two sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁-C₆alkyl, C₁-C₆haloalkyl, C₂-C₆alkenyl, C₂-C₆haloalkenyl, C₂-C₆alkynyl, C_2 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 alkynyloxy, C_1 - C_6 -Alkylthio, C_1 - C_6 haloalkylthio, C_3 - C_6 alkenylthio, C_3 - C_6 haloalkenylthio, C_3 - C_6 alkynylthio, C_1 - C_4 alkoxy-C₁-C₂alkylthio, C₁-C₄alkylcarbonyl-C₁-C₂alkylthio, C₁-C₄alkoxycarbonyl-C₁-C₂alkylthio, cyano- C_1 - C_4 alkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 haloalkylsulfonyl, aminosulfonyl, C1-C2alkylaminosulfonyl, C2-C4dialkylaminosulfonyl, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C_1 - C_3 alkyl, C_1 - C_3 haloalkyl, C_1 - C_3 alkoxy, C_1 - C_3 haloalkoxy, halogen, cyano or nitro, and where substituents on the nitrogen in the heterocyclic ring are other than halogen;

 R_{21} and R_{22} independently of one another are C_1 - C_4 alkyl or C_1 - C_4 haloalkyl; R_{23} , R_{24} and R_{25} independently of one another are hydrogen or C_1 - C_4 alkyl; n, n_1 , n_2 , n_3 and n_4 independently of one another are 0, 1 or 2; Q is Q_1

in which

 R_6 , R_7 , R_8 and R_9 independently of one another are hydrogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_1 - C_6 alkoxycarbonyl, C_1 - C_6 alkyl- $S(O)_{n17}$, C_1 - C_6 alkyl-NHS(O)₂, C_1 - C_6 alkylamino, di- $(C_1$ - C_6 alkyl)amino, hydroxyl, C_1 - C_6 alkoxy, C_3 - C_6 alkenyloxy, hydroxy- C_1 - C_6 alkyl, C_1 - C_4 alkylsulfonyloxy- C_1 - C_6 alkyl, tosyloxy- C_1 - C_6 alkyl, halogen, cyano, nitro, phenyl or phenyl which is substituted by C_1 - C_4 alkyl, C_1 - C_4 haloalkyl,

$$\label{eq:complex} \begin{split} &C_1\text{-}C_4\text{alkoxy},\ C_1\text{-}C_4\text{haloalkoxy},\ C_1\text{-}C_4\text{alkylcarbonyl},\ C_1\text{-}C_4\text{alkoxycarbonyl},\ \text{amino},\ C_1\text{-}C_4\text{-}\\ &\text{alkylamino},\ \text{di-}C_1\text{-}C_4\text{alkylamino},\ C_1\text{-}C_4\text{alkyl-}S(O)_{n18},\ C_1\text{-}C_4\text{alkyl-}S(O)_2O,\ C_1\text{-}C_4\text{haloalkyl-}S(O)_{n5},\ C_1\text{-}C_4\text{haloalkyl-}S(O)_2O,\ C_1\text{-}C_4\text{alkyl-}S(O)_2NH,\ C_1\text{-}C_4\text{alkyl-}S(O)_{n19}N(C_1\text{-}C_4\text{alkyl}),\ \text{halogen},\ \text{nitro},\ COOH\ or\ cyano; \end{split}$$

or adjacent R₆ and R₇ or R₈ and R₉ together are -(CH₂)_m-;

 n_5 n_{17} , n_{18} and n_{19} independently of one another are 0, 1 or 2;

m is 2, 3, 4, 5, or 6;

W is oxygen, $S(O)_{n6}$, $-CR_{11}$, R_{12} -, -C(O)- or $-NR_{13}$ -;

 n_6 is 0, 1 or 2;

 $R_{11} \text{ is hydrogen, } C_1\text{-}C_4\text{alkyl, } C_1\text{-}C_3\text{alkoxyalkyl, } C_1\text{-}C_3\text{alkoxyalkyl, } C_1\text{-}C_3\text{alkoxyalkyl, } C_1\text{-}C_4\text{alkoxyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_1\text{-}C_4\text{alkoxyl, } C_1\text{-}C_4\text{alkoxyl, } C_1\text{-}C_4\text{alkoxyl, } C_1\text{-}C_4\text{alkoxyl, } C_1\text{-}C_4\text{alkoxyl, } C_1\text{-}C_4\text{alkoxyl, } C_1\text{-}C_4\text{alkyl, } C_1\text{$

 n_7 , n_{20} and n_{21} independently of one another are 0, 1 or 2;

or R₁₂ together with R₉ is a group -(CH₂)_O-;

o is 1, 2, 3, 4 or 5;

R₁₂ is hydrogen, C₁-C₄alkyl or C₁-C₄haloalkyl;

or R₁₂ together with R₁₁ is a group -(CH₂)_{m1};

m₁ is 2, 3, 4, 5, or 6;

 $R_{10} \text{ is hydroxyl, O'M}^+, \text{ halogen, } C_1\text{-}C_{12}\text{alkoxy, } C_1\text{-}C_{12}\text{alkylcarbonyloxy, } C_2\text{-}C_4\text{-}\\ \text{alkenylcarbonyloxy, } C_3\text{-}C_6\text{cycloalkylcarbonyloxy, } C_1\text{-}C_{12}\text{alkoxycarbonyloxy, } C_1\text{-}C_{12}\text{-}\\ \text{alkylcarbonyloxy, } R_{23}R_{24}\text{N-C(O)O, } C_1\text{-}C_{12}\text{alkylS(O)}_{n8}\text{-}, } C_1\text{-}C_4\text{haloalkyl-S(O)}_{n9}\text{-}, } C_2\text{-}C_{12}\text{-}\\ \text{alkenylS(O)}_{n10}\text{-}, } C_2\text{-}C_{12}\text{haloalkenylS(O)}_{n11}\text{-}, } C_2\text{-}C_{12}\text{alkynylS(O)}_{n12}\text{-}; } \text{benzyloxy, phenoxy, phenylthio, phenylsulfinyl or phenylsulfonyl, where the phenyl group, in turn, can be substituted by } C_1\text{-}C_4\text{alkyl, } C_1\text{-}C_4\text{haloalkyl, } C_1\text{-}C_4\text{alkoxy, } C_1\text{-}C_4\text{haloalkoxy, } C_1\text{-}C_4\text{alkylcarbonyl, } C_1\text{-}C_4\text{alkoxycarbonyl, } C_1\text{-}C_4\text{alkylamino, } \text{di-}C_1\text{-}C_4\text{alkylamino, } C_1\text{-}C_4\text{alkyl-S(O)}_{n13}, \\ C_1\text{-}C_4\text{alkyl-S(O)}_{n14}, \\ C_1\text{-}C_4\text{haloalkyl-S(O)}_{n14}, \\ C_1\text{-}C_4\text{haloalkyl-S(O)}_{n2}, \\ C_1\text{-}C_4\text{alkyl-S(O)}_{n2}, \\ C_1\text{-}C_4\text{alkyl)}, \\ \text{halogen, nitro or cyano, or is } C_1\text{-}C_4\text{alkyl-S(O)}_{n2}, \\ \text{phenyl-S(O)}_{n2}, \\ \text{phenyl-S(O)}_{n3}, \\ \text{phenyl-$

 n_8 , n_9 , n_{10} , n_{11} , n_{12} , n_{13} and n_{14} independently of one another are 0, 1 or 2; R_{13} is hydrogen, C_1 - C_4 alkyl, C_1 - C_4 alkoxycarbonyl or phenyl which, in turn, can be substituted by C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkoxy, C_1 - C_4 alkylcarbonyl, C_1 - C_4 alkoxycarbonyl, C_1 - C_4 alkylamino, C_1 - C_4 alkylamino, C_1 - C_4 alkyl- $S(O)_2O$, C_1 - C_4 alkyl), halogen, nitro or cyano;

 n_{15} and n_{16} independently of one another are 0, 1 or 2; and the agrochemically tolerated salts M^{+} and all stereoisomers and tautomers of the compounds of the formula I.

In a preferred group of compounds of the formula I, R₁₀ is halogen, thiocyanato, C₁- C_{12} alkylthio, C_1 - C_{12} alkylsulfinyl, C_1 - C_{12} alkylsulfonyl, C_1 - C_{12} haloalkylthio, C_1 - C_{12} haloalkylsulfinyl, C_1 - C_{12} haloalkylsulfonyl, C_1 - C_{12} alkenylthio, C_2 - C_{12} alkenylsulfinyl, C_2 - C_{12} alkenylsulfonyl, C2-C12haloalkenylthio, C2-C12haloalkenylsulfinyl, C2-C12-haloalkenylsulfonyl, C_2 - C_{12} alkynylthio, C_2 - C_{12} alkynylsulfinyl, C_2 - C_{12} alkynylsulfonyl, C_1 - C_4 alkoxycarbonyl- C_1 - C_2 alkylthio, C_1 - C_4 alkoxycarbonyl- C_1 - C_2 alkylsulfinyl, C_1 - C_4 alkoxycarbonyl- C_1 - C_2 alkylsulfonyl, C_1 - C_8 alkyl- $S(O)_2$ NH, C_1 - C_8 haloalkyl- $S(O)_2$ NH, C_1 - C_8 alkyl- $S(O)_2$ O, C_1 - C_{18} alkylcarbonyloxy, C_2 - C_{18} alkenylcarbonyloxy, C_3 - C_6 cycloalkylcarbonyloxy, C_1 - C_{12} alkoxycarbonyloxy, C_1 - C_{12} alkylthiocarbonyloxy, R₁₆R₁₇NC(O)O-, R₁₆R₁₇NC(S)O-, benzylthio, benzylsulfinyl, benzylsulfonyl, phenylthio, phenylsulfinyl, phenylsulfonyl, phenylsulfonyloxy or benzoyloxy, it being possible for the phenyl groups, in turn, to be substituted as indicated in claim 1; or is a group Ar₁-thio, Ar₁-sulfinyl, Ar₁-sulfonyl in which Ar₁ is a five- or six-membered monocyclic ring system which can be aromatic or partially saturated and can contain 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur and which, in turn, can be substituted as indicated in claim 1; or is thienylcarbonyloxy or furylcarbonyloxy, it being possible for these, in turn, to be substituted by methyl or halogen, or pyridylcarbonyloxy which, in turn, can be substituted as indicated in claim 1.

In preferred compounds of the formula I, furthermore, R₁₀ is hydroxyl or O⁻M⁺.

Other compounds of the formula I which must be emphasized are those in which W is oxygen, $-CR_{11}R_{12}$ - or -C(O)-, where, in particular when W is $-CR_{11}R_{12}$ -, a) R_6 is hydrogen, methyl, ethyl, cyano, methoxycarbonyl, ethoxycarbonyl, methylthio, methylsulfinyl, methylsulfonyl or methoxy; and R_7 , R_8 , R_9 , R_{11} and R_{12} independently of one another are hydrogen, C_1 - C_4 alkyl, C_1 - C_3 haloalkyl, C_2 - C_3 alkenyl or C_2 - C_3 alkynyl, or

- b) adjacent R_6 and R_7 and/or R_8 and R_9 together are -(CH₂)_m-, -C(O)O(CH₂)₂- or S(O)_{n21}(CH₂)₃-; or
- c) R_6 is hydrogen, methyl, ethyl, methoxycarbonyl, ethoxycarbonyl, methylsulfinyl, methylsulfonyl or methoxy and R_{12} together with R_9 is -(CH₂)_o-.

Furthermore, preferred groups of compounds of the formula I are those in which W is oxygen and R_6 , R_7 , R_8 and R_9 independently of one another are hydrogen or C_1 - C_3 alkyl; or

W is -C(O)- and R_6 , R_7 , R_8 and R_9 independently of one another are C_1 - C_3 alkyl; or R_2 is hydrogen and R_3 is methyl; or

R₂ is methyl, ethyl, n-propyl, i-propyl, vinyl, methoxymethyl, methoxycarbonyloxymethyl, ethoxycarbonyloxymethyl, acetoxymethyl, propionyloxymethyl, chloromethyl, bromomethyl, fluoromethyl, difluoromethyl, trifluoromethyl or cyanomethyl.

Other compounds of the formula I which must be emphasized are those in which R_4 is hydrogen or methyl or R_5 is trifluoromethyl, difluorochloromethyl, pentafluoroethyl, heptafluoropropyl or difluoromethyl.

In a further preferred group of compounds of the formula I, R_3 is hydrogen, R_2 is C_1 - C_4 alkyl, C_1 - C_3 haloalkyl, cyclopropyl, C_2 - C_3 alkenyl, C_2 - C_3 haloalkenyl, C_2 - C_3 alkynyl, allenyl, C_1 - C_2 -alkoxy- C_1 - C_2 alkyl, C_1 - C_2 alkyl, cyano- C_1 - C_2 alkyl, C_1 - C_2 alkyl, C_1 - C_2 alkyl, C_1 - C_3 alkylcarbonyloxy- C_1 - C_3 alkyl, C_1 - C_3 alkylcarbonyloxy, propargyloxy, C_1 - C_3 alkylthio, C_1 - C_3 alkylsulfinyl or cyano.

The compounds of the formula I in which Q is a group Q₁ can be prepared using processes which are known per se, for example those described in EP-A-0 353 187 and EP-A-0 316 491, for example either by

a) reacting a compound of the formula III

$$\begin{array}{c|c}
R_3 & O \\
\hline
 & X \\
\hline
 & R_5
\end{array}$$
(III)

in which R_2 , R_3 , R_4 and R_5 have the meaning given under formula I and X is a leaving group, for example halogen or cyano, with a compound of the formula II

$$O \xrightarrow{R_6} (H)$$

$$O \xrightarrow{R_9} R_8$$

$$R_9 \xrightarrow{R_8} (H)$$

in which R_6 , R_7 , R_8 , R_9 and W have the meaning given under formula I in the presence of a base and in an inert organic solvent to give the compound of the formula IV

$$\begin{array}{c|c} R_3 & O & R_6 \\ \hline \\ R_4 & O \\ \hline \\ R_5 & N & R_2 \end{array} \qquad \begin{array}{c} R_7 \\ (W) & R_8 \\ O \\ O \end{array} \qquad (IV)$$

and subsequently isomerizing the latter, for example in the presence of a base and a catalytic amount of dimethylaminopyridine (DMAP) or a cyanide source; or

b) reacting a compound of the formula XVI

$$R_4$$
 OH R_5 OH R_2

in which R_2 , R_3 , R_4 and R_5 have the meaning given under formula I with compounds of the formula II

$$O = \begin{pmatrix} R_6 \\ R_7 \\ (W) \end{pmatrix}$$

$$O = \begin{pmatrix} R_8 \\ R_8 \end{pmatrix}$$

$$R_8 = \begin{pmatrix} R_8 \\ R_8 \end{pmatrix}$$

in which R_6 , R_7 , R_8 , R_9 and W have the meaning given under formula I in an inert organic solvent in the presence of a base and a coupling agent to give the compound of the formula IV

and subsequently isomerizing the latter, for example as described under route a). The preparation of the compounds of the formula I is illustrated in greater detail in reaction scheme 1 below.

Reaction scheme 1

Route a):

Base, for example,
$$(C_2H_5)_3N$$
, Solvent, for example, CH_2CI_2 0-110°C

Isomerization:

Base, for example, $(C_2H_5)_3N$, R_4
 R_5
 R_5
 R_4
 R_5
 R_5

Route b):

Base, for example
$$(C_2H_5)_3N$$
, coupling reagent, for example $(C_2H_5)_3N$, coupling IV

XVI

Solvent, for example, CH_2CI_2 , $O-110^{\circ}C$

Base, for example,
$$(C_2H_5)_3N$$
, R_4

KCN cat.

R₅

N

R₂

The compounds of the formula I with the group Q_1 in which R_{10} is hydroxyl can preferably be prepared in accordance with this reaction scheme. The starting material for the preparation of the compounds of the formula I in which Q is the group Q_1 and R_{10} is hydroxyl is, in accordance with reaction scheme 1, route a), the carboxylic acid derivatives of the formula III in which X is a leaving group for example halogen, for example iodine, bromine and, in particular chlorine, N-oxyphthalimide or N,O-dimethylhydroxylamino or part of an activated

the corresponding carboxylic acid) or $C_2H_5N=C-NH(CH_2)_3N(CH_3)_2$ (formed from N-ethyl-N'-(3-O-

dimethylaminopropyl)carbodiimide (EDC) and the corresponding carboxylic acid). These are reacted with the dione derivatives of the formula II in an inert organic solvent, for example a halogenated hydrocarbon, for example dichloromethane, a nitrile, for example acetonitrile, or an aromatic hydrocarbon, for example toluene, and in the presence of a base, for example an alkylamine, preferably triethylamine, an aromatic amine, for example pyridine or 4-dimethylaminopyridine (DMAP) to give the isomeric enol ethers of the formula IV. This esterification is successfully carried out at temperatures from 0°C to 110°C.

The isomerization of the ester derivatives of the formula IV to give the dione derivatives of the formula I (in which R₁₀ is OH) can be carried out, for example, in analogy to

EP-A-0 353 187 or EP-A-0 316 491 in the presence of a base, for example an alkylamine, for example triethylamine, a carbonate, for example potassium carbonate, and a catalytic amount of DMAP or a catalytic amount of a cyanide source, for example acetone cyanohydrin or potassium cyanide. Both reaction steps can be carried out *in situ* without isolation of the intermediates IV, in particular when using a cyanide compound of the formula III (X = cyano), or in the presence of a catalytic amount of acetone cyanohydrin or potassium cyanide.

In accordance with reaction scheme 1, route b), the desired diones of the formula I (in which R_{10} is hydroxyl) can be obtained, for example, analogously to Chem. Lett. 1975, 1045 by esterifying the carboxylic acids of the formula XVI with the dione derivatives of the formula II in an inert solvent, for example a halogenated hydrocarbon, e.g. dichloromethane, a nitrile, e.g. acetonitrile or an aromatic hydrocarbon, e.g. toluene, in the presence of a base, for example an alkylamine, e.g. triethylamine, and a coupling agent, for example 2-chloro-1-methylpyridinium iodide. Depending on the solvent used, this esterification is successfully carried out at temperatures from 0°C to 110°C and first yields, as described under route a), the isomeric ester of the formula IV which can be isomerized as described under route a), for example in the presence of a base and a catalytic amount of DMAP, or a cyanide source, to give the desired dione derivatives of the formula I (R_{10} = hydroxyl).

The activated carboxylic acid derivatives of the formula III in reaction scheme I (route a) in which X is a leaving group, for example halogen, e.g. bromine, iodine or, in particular, chlorine, can be prepared by known standard methods, for example as described by C. Ferri "Reaktionen der organischen Synthese" ["Reactions in organic synthesis"], Georg Thieme Verlag, Stuttgart, 1978, page 460 et seq. This is shown in the reaction scheme 2 which follows.

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Reaction scheme 2

In accordance with reaction scheme 2, the compounds of the formula III in which X has the abovementioned meaning are prepared, for example, by using a halogenating agent, for example thionyl halides, e.g. thionyl chloride or thionyl bromide; phosphorus halides or phosphorus oxyhalides, e.g. phosphorus pentachloride or phosphorus oxychloride, or phosphorus pentabromide or phosphoryl bromide; or oxalyl halides, for example oxalyl chloride, or by employing a reagent for forming activated esters, for example N,N'-dicyclohexylcarbodiimide (DCC) or N-ethyl-N'-(3-dimethylaminopropyl)carbodiimide (EDC), of the formula XVII. Examples of meanings of X for the compound of the formula XVII as halogenating agent is a leaving group, for example halogen, e.g. fluorine, bromine or iodine and, in particular, chlorine, and W₁ is, for example, PCl₂, SOCI, SOBr or CICOCO.

The reaction is preferably carried out in an inert organic solvent, for example in aliphatic, halogenated aliphatic, aromatic or halogenated aromatic hydrocarbons, e.g. n-hexane, benzene, toluene, xylenes, dichloromethane, 1,2-dichloroethane or chlorobenzene, at reaction temperatures in the range of -20°C to the reflux temperature of the reaction mixture, preferably at 40-150°C, and in the presence of a catalytic amount of N,N-dimethylformamide. Such reactions are generally known, and various variations with regard to the leaving group X are described in the literature.

Compounds of the formula I in which R₁₀ is other than hydroxyl or halogen can be prepared by conversion methods which are generally known from the literature, for example by acylation or carbamoylation methods using appropriate acid chlorides in the presence of a suitable base, starting from compounds in which R₁₀ is hydroxyl, or can be prepared by nucleophilic substitution reactions on chlorides of the formula I in which R₁₀ is halogen, which can also be obtained by known methods by reaction with a chlorinating agent such as phosgene, thionyl chloride or oxalyl chloride. In this case, examples of compounds which are employed are suitably substituted amines, or, directly, hydroxylamines, or alkylsulfonamides,

mercaptans, thiophenols, phenols, Ar₅-NH₂ or Ar₁-SH, in the presence of a base, for example 5-ethyl-2-methylpyridine, diisopropylethylamine, triethylamine, sodium bicarbonate, sodium acetate or potassium carbonate.

Compounds of the formula I in which R₁₀ contains thio groups can be oxidized in analogy to known standard methods, for example using peracids, e.g. meta-chloroperbenzoic acid (m-CPBA) or peracetic acid, to give the corresponding sulfones and sulfoxides of the formula I. The degree of oxidation on the sulfur atom (SO- or SO₂-) can be controlled by the amount of oxidant.

Also, the resulting derivatives of the formula I in which R_{10} is other than hydroxyl can exist in various isomeric forms which, if appropriate, can be isolated in pure form. The invention therefore also extends to all of these stereoisomeric forms. Examples of these isomeric forms are the formulae I*, I** and I*** below in which Q is the group Q_1 (see also note and scheme on page 10 above).

All other compounds from within the scope of the formula I can be readily prepared taking into consideration the chemical properties of the pyridyl or Q moiety.

The end products of the formula I can be isolated in the customary manner by concentration or by evaporating the solvent and purified by recrystallization or trituration of the solid residue in solvents in which they are not readily soluble, such as ethers, aromatic hydrocarbons or chlorinated hydrocarbons, by distillation or by means of column chromatography and a suitable eluent.

Furthermore, the skilled worker knows in which sequence certain reactions are expediently carried out to avoid any side reactions. Unless a directed synthesis for isolating pure isomers is carried out, the product may be obtained as a mixture of two or more isomers. The isomers can be resolved by methods known per se.

Compounds of the formula I in which n is 1, i.e. the corresponding N-oxides of the formula I, can be synthesized by reacting a compound of the formula I in which n is 0 with a suitable oxidant, for example with the H_2O_2 -urea adduct in the presence of an acid anhydride, e.g. trifluoroacetic anhydride.

Compounds of the formula I in which R in the ortho-position relative to the pyridine nitrogen is 1-chloro-C₁-C₂alkyl, 1-hydroxy-C₁-C₂alkyl, 1-(C₁-C₆alkylcarbonyloxy)-C₁-C₂alkyl, 1-benzoyloxy-C₁-C₂alkyl, 1-(C₁-C₄alkoxycarbonyloxy)-C₁-C₂alkyl, 1-(C₁-C₄alkylsulfinyl)-C₁-C₂-alkyl, 1-(C₁-C₄alkylsulfinyl)-C₁-C₂alkyl, 1-thiocyanato-C₁-C₂alkyl, 1-cyano-C₁-C₂alkyl, can also be prepared by, for example, heating an N-oxide of the formula I under known reaction conditions, for example in the presence of tosyl chloride (see, for example, Parham, W. E.; Sloan, K. B.; Reddy, K. R.; Olson, P. E.; *J Org Chem* 1973, **38**, 927) or in the presence of an acid anhydride (see, for example, Konno, K.; Hashimoto, K.; Shirahama, H.; Matsumoto, T.; *Heterocycles* 1986, 24, 2169) and, if appropriate, subsequently further reacting the product. These reaction sequences may be demonstrated with reference to the following example:

Compounds of the formula I in which R in the ortho-position relative to the pyridine nitrogen, in particular 1-bromo- C_1 - C_2 alkyl, 1-chloro- C_1 - C_2 alkyl, 1-fluoro- C_1 - C_2 alkyl, 1,1-dibromomethyl, 1,1-dichloromethyl, formyl, 1-(C_1 - C_4 alkylthio)- C_1 - C_2 alkyl, 1-(C_1 - C_4 alkylsulfinyl)- C_1 - C_2 alkyl, 1-thiocyanato- C_1 - C_2 alkyl or 1-cyano- C_1 - C_2 alkyl, can also be prepared, for example, by oxidizing a compound of the formula I in which R_{10} is, in particular, chlorine, C_1 - C_4 alkoxycarbonyloxy or benzoylcarbonyloxy under known halogenation conditions, for example with N-bromosuccinimide or N-chlorosuccinimide in the presence of light and a free-radical initiator, for example benzoyl peroxide, to give the 1-bromo or 1-chloro, 1,1-dibromo or 1,1-dichloro compound, and subsequently refunctionalizing the latter to give the corresponding derivatives. Again, these reaction sequences may be demonstrated with reference to the example below.

Compounds of the formula I can also be synthesized by reacting a compound of the formula I in which p is 0 and R_2 is C_1 - C_6 alkyl with a suitable base, for example lithium diisopropylamide or n-butyllithium, at temperatures between -100 and -20°C (preferably -70 and -50°C) in an inert solvent (for example tetrahydrofuran) to give the corresponding dianion. The skilled worker knows how such carbanions can be converted by means of electrophilic substitution, for example with a chloroformic ester. This reaction sequence may be demonstrated with reference to the following example:

Other compounds from within the scope of the formula I can be prepared with suitable electrophiles taking into consideration the chemical properties of the pyridyl or Q moiety.

The compounds of the formula IIIa

in which

R₅₀₁ is C₁-C₆haloalkyl;

R₃₀₁ is hydrogen;

R₄₀₁ is hydrogen or C₁-C₆alkyl; and

 R_{201} is C_1 - C_6 alkyl, C_1 - C_6 haloalkyl- C_1 - C_4 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, or C_1 - C_2 -alkoxycarbonyl- or phenyl-substituted vinyl, C_2 - C_6 alkynyl or C_2 - C_6 haloalkynyl; or trimethylsilyl-, hydroxyl-, C_1 - C_2 alkoxy-, C_1 - C_2 alkoxy-, or phenyl-substituted ethynyl or

 C_3 - C_6 allenyl; or C_3 - C_6 cycloalkyl, halogen-substituted C_3 - C_6 cycloalkyl, C_1 - C_4 alkoxy- C_1 - C_4 alkyl, C_1 - C_4 alkyl- $S(O)_{n4}$ - C_1 - C_4 alkyl, cyano- C_1 - C_4 alkyl, C_1 - C_4 alkoxycarbonyl- C_1 - C_4 alkyl, C_1 - C_4 thiocyanato, oxiranyl, C₁-C₄alkylamino-C₁-C₄alkyl, C₁-C₄dialkylamino-C₁-C₄alkyl, hydroxy-C₁-C₄alkyl, C₁-C₁₂alkylthiocarbonyl-C₁-C₄alkyl or formyl-C₁-C₄alkyl, or R₂₀₁ is a five- to tenmembered monocyclic or fused bicyclic ring system which can be aromatic or partially saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, the ring system being bonded to the pyridine ring via a C₁-C₄alkylene, -CH=CH-, -C=C-, -CH₂O- , -CH₂N(C₁-C₄alkyl)-, -CH₂S-, -CH₂SO- or -CH₂SO₂group and it not being possible for each ring system to contain more than 2 oxygen atoms and more than two sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_3 - C_6 alkenyl, C_3 - C_6 haloalkenyl, C_3 -C₆alkynyl, C₃-C₆haloalkynyl, C₁-C₆alkoxy, C₁-C₆haloalkoxy, C₃-C₆alkenyloxy, C₃-C₆alkynyloxy, mercapto, C₁-C₆alkylthio, C₁-C₆haloalkylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C₃-C₆-alkynylthio, C₂-C₅alkoxyalkylthio, C₃-C₅acetylalkylthio, C₃-C₆alkoxycarbonylalkylthio, C₂-C₄-cyanoalkylthio, C₁-C₆alkylsulfinyl, C₁-C₆haloalkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆-haloalkylsulfonyl, aminosulfonyl, C₁-C₂alkylaminosulfonyl, di-(C₁- C_2 alkyl)aminosulfonyl, di- $(C_1$ - C_4 alkyl)amino, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C1-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃-haloalkoxy, halogen, cyano or nitro, and where the substituents on the nitrogen in the heterocyclic ring are other than halogen; and X is halogen or cyano, are novel and were developed specifically for the preparation of the compounds of the formula I and are therefore a further subject of the present invention.

The compounds of the formula XVIa

in which R_{201} , R_{301} , R_{401} and R_{501} have the abovementioned meaning, with the proviso that, if R_{501} is trifluoromethyl and, simultaneously, R_{301} and R_{401} are hydrogen, then R_{201} is other than $C_{1-}C_{6}$ alkyl, are novel and therefore a further subject of the present invention.

The compounds of the formula Q₁ (or formula II) are known and can be prepared by methods similar to those described, for example in J. Org. Chem. (1977), **42**, 1163-9, Brit. UK Pat. Appl.GB 2205316, DE 3902818, GB 8706557, DE 4434987, WO 9213821 and Aust. J. Chem. (1976), 29(11), 2525-31, Chem. Commun. (1998), (16), 1691-1692.

The compounds of the formula XVI (or XVIa and XVIb) are synthesized by methods similar to known methods, for example as in Heterocycles, **46**, 129 (1997) or Helvetica Chimica Acta 71, 596 (1988), and is characterized in that either

a) a compound of the formula V

$$R_{14}O$$
 R_{401}
 R_{401}
 (V)

in which R₃₀₁ is hydrogen;

R₄₀₁ is hydrogen, C₁-C₆alkyl or phenyl, it being possible for phenyl, in turn, to be substituted by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro; or R₄₀₁ is a five- to ten-membered monocyclic or fused bicyclic ring system which can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur and it not being possible for the ring system to contain more than 2 oxygen atoms and more than two sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁-C₆alkyl, C₁-C₆haloalkyl, C₂-C₆alkenyl, C₂-C₆haloalkenyl, C₂-C₆alkynyl, C_2 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 alkynyloxy, C_1 -C₆alkylthio, C₁-C₆haloalkylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C₃-C₆alkynylthio, C_1 - C_4 alkoxy- C_1 - C_2 alkylthio, C_1 - C_4 alkylcarbonyl- C_1 - C_2 alkylthio, C_1 - C_4 alkoxycarbonyl- C_1 - C_2 alkylthio, cyano-C₁-C₄alkylthio, C₁-C₆alkylsulfinyl, C₁-C₆haloalkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆haloalkylsulfonyl, aminosulfonyl, C₁-C₂alkylaminosulfonyl, di-(C₁-C₂alkyl)aminosulfonyl, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, and where substituents on the nitrogen in the heterocyclic ring are other than halogen; and R₁₄ is C₁-C₄alkyl;

is acylated with a compound of the formula VI

in which R₅₀₁ is C₁-C₆haloalkyl to give the compound of the formula VII

$$R_{14}O \xrightarrow{R_{301}} O R_{501}$$
 (VII)

in which R_{301} , R_{401} , R_{501} and R_{14} have the abovementioned meaning in the presence of a base, for example an aromatic amine, e.g. pyridine, and the alkoxy group is subsequently exchanged for the amino group with ammonia in an organic solvent, for example a halogenated hydrocarbon, e.g. dichloromethane, a nitrile, e.g. acetonitrile. The resulting compound of the formula VIII

$$R_{301} \xrightarrow{NH_2} O \\ R_{401}$$
 (VIII)

is subsequently subjected to a condensation reaction with a compound of the formula IX

$$R_{14}O \longrightarrow R_{201} \qquad (IX)$$

in which R_{201} is C_1 - C_6 alkyl, C_1 - C_6 haloalkyl- C_1 - C_4 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_2 - C_6 -alkynyl, C_2 - C_6 haloalkynyl, C_3 - C_6 cycloalkyl, C_1 - C_4 alkoxy- C_1 - C_4 alkyl, C_1 - C_4 alkyl- $S(O)_{n4}$ - C_1 - C_4 -alkyl, cyano- C_1 - C_4 alkyl, C_1 - C_4 alkoxycarbonyl- C_1 - C_4 alkyl, C_1 - C_4 alkyl, C_1 - C_4 alkyl, oxiranyl, C_1 - C_4 alkylamino- C_1 - C_4 alkyl, di- $(C_1$ - C_4 alkyl)amino- C_1 - C_4 alkyl or formyl- C_1 - C_4 alkyl;

or R₂₀₁ is a group Ar₆-C₁-C₄alkyl in which Ar₆ is a five- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic or partially saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, it not being possible for each ring system to contain more than 2 oxygen atoms and more than two sulfur atoms and it being possible for the ring system itself to be mono-, di- or trisubstituted by C1-C₆alkyl, C₁-C₆haloalkyl, C₃-C₆alkenyl, C₃-C₆haloalkenyl, C₃-C₆alkynyl, C₃-C₆haloalkynyl, C₁-C₆alkoxy, C₁-C₆haloalkoxy, C₃-C₆alkenyloxy, C₃-C₆alkynyloxy, mercapto, C₁-C₆alkylthio, C₁-C₆haloalkylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C₃-C₆-alkynylthio, C₂-C₅alkoxyalkylthio, C₃-C₅acetylalkylthio, C₃-C₀alkoxycarbonylalkylthio, C₂-C₄-cyanoalkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 -haloalkylsulfonyl, aminosulfonyl, C₁-C₂alkylaminosulfonyl, di-(C₁-C₂alkyl)aminosulfonyl, di-(C₁-C₄alkyl)amino, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, and where substituents on the nitrogen in the heterocyclic ring are other than halogen, and R₁₄ has the abovementioned meaning, and subsequently hydrolysing the resulting compound of the formula Xa

is subsequently hydrolysed to give the compound of the formula XVIa

in which R₂₀₁, R₃₀₁, R₄₀₁ and R₅₀₁ have the abovementioned meaning; or

b) a compound of the formula XI

in which R_{14} has the abovementioned meaning is subjected to a condensation reaction with a compound of the formula XII

$$\begin{array}{c} R_{4} \\ \\ R_{5} \end{array} O R_{14} \qquad (XII)$$

and the resulting compound of the formula XIII

$$R_{14}O$$
 OH N R_{5} $(XIII)$

in which R_3 , R_4 and R_5 have the abovementioned meaning and R_{14} is C_1 - C_4 alkyl, is chlorinated to give the compound of the formula XIV

$$R_{14}O$$
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 $R_{14}O$

in which R_3 , R_4 , R_5 and R_{14} have the abovementioned meaning (for example using POCI₃), and this compound is subsequently reacted with a nucleophile of the formula XV

in which Z is SH, OH or amino and R_{15} is C_1 - C_6 alkyl, C_3 - C_6 alkenyl, C_3 - C_6 haloalkenyl, C_3 - C_6 alkynyl, C_3 - C_6 haloalkynyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 haloalkyl, phenyl or benzyl, it being possible for the phenyl group, in turn, to be substituted by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, or is C₁-C₄alkoxy-C₁-C₄alkyl, C₁-C₄alkylthio- C_1 - C_4 alkyl, C_1 - C_4 alkylsulfinyl- C_1 - C_4 alkyl, C_1 - C_4 - C_4 alkyl, C_1 - C_4 alkylsulfonyl or di- $(C_1-C_4$ alkyl)aminosulfonyl, or R_{15} is a five- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic or partially saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, it not being possible for each ring system to contain more than 2 oxygen atoms and more than two sulfur atoms and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁- C_6 alkyl, C_1 - C_6 haloalkyl, C_3 - C_6 alkenyl, C_3 - C_6 haloalkenyl, C_3 - C_6 alkynyl, C_3 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 -haloalkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 alkynyloxy, mercapto, C_1 - C_6 alkylthio, C_1 -C₆-haloalkylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C₃-C₆alkynylthio, C₂- C_5 alkoxyalkylthio, C_3 - C_5 acetylalkylthio, C_3 - C_6 alkoxycarbonylalkylthio, C_2 - C_4 cyanoalkylthio, C₁-C₆alkylsulfinyl, C₁-C₆haloalkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆haloalkylsulfonyl, aminosulfonyl, C_1 - C_2 alkylaminosulfonyl, di- $(C_1$ - C_2 alkyl)aminosulfonyl, $(CH_2)_nR_7$, NR_8R_9 , halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C_1 - C_3 alkyl, C_1 - C_3 haloalkyl, C_1 - C_3 alkoxy, C_1 -C₃haloalkoxy, halogen, cyano or nitro, and substituents on the nitrogen in the heterocyclic ring being other than halogen, in the presence of a base to give compounds of the formula Xb

$$R_{14}O$$
 R_{3}
 R_{4}
 R_{5}
 R_{5}
 R_{5}

in which R_{14} , R_{15} , R_3 , R_4 , R_5 and Z have the abovementioned meanings and the resulting compound is subsequently hydrolysed to give the compound of the formula XVIb

HO
$$R_3$$
 R_5 (XVIb)

in which R₁₅, R₃, R₄, R₅ and Z have the abovementioned meaning.

Compounds in which Z-R₁₅ and Z are oxygen and R₁₅ is C₁-C₆alkyl, C₃-C₆alkenyl, C₃-C₆-alkynyl, C₁-C₆haloalkyl, C₃-C₆haloalkenyl, cyano-C₁-C₄alkyl, C₁-C₄alkoxy-C₁-C₄alkyl, C₁-C₄-alkylthio-C₁-C₄alkyl or C₁-C₄alkoxycarbonyl-C₁-C₄alkyl can also be reacted starting from XIII by direct alkylation with the corresponding alkylating agent L-R₁₅ XVa in which L is a leaving group such as chlorine, bromine, iodine, mesyloxy or tosyloxy.

Compounds of the formula XVIb in which Z-R₁₅ is fluorine are prepared by reacting a compound of the formula XIV with potassium fluoride and, if appropriate, a catalytic amount of 18-crown-6 in the presence of a polar aprotic solvent, for example acetonitrile, dimethylformamide or sulfolane. Compounds of the formula XVIc in which Z-R₁₅ is hydrogen are prepared by reducing the chlorine group in formula XIV, for example with hydrogen in the presence of a suitable metal catalyst or with ammonium formate, in a suitable solvent. The preparation of the compounds of the formula XVI or XVIa, XVIb and XVIc are illustrated in greater detail in reaction schemes 3 and 4 which follow.

Reaction scheme 3

Reaction scheme 4

Compounds of the formula XVId in which R_2 is bromomethyl, cyanomethyl, thiocyanatomethyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, a C_1 - C_2 alkoxycarbonyl- or phenyl-substituted vinyl, C_2 - C_6 alkynyl, C_2 - C_6 haloalkynyl, a trimethylsilyl-, hydroxyl-, C_1 - C_2 alkoxy-, C_1 - C_2 alkoxycarbonyl- or phenyl-substituted ethynyl, C_3 - C_6 allenyl, C_3 - C_6 cycloalkyl or mono- or polyhalogenated C_3 - C_6 cycloalkyl can be prepared, for example, in accordance with generally known conversion methods which are shown in reaction scheme 4a.

Reaction scheme 4a

Intermediates of the formula XVIa in which R_{501} is CF_2CI are prepared as described in scheme 3 or by reacting a compound of the formula Xa in which R_{501} is trichloromethyl with hydrofluoric acid in a pressurized vessel at temperatures between 0 and 220°C (preferably 60-200°C).

Compounds of the formula XVIa in which R_{501} is CHF₂ can be prepared as in scheme 3 or by heating a compound of the formula Xa in which R_{301} , R_{401} , R_{14} and R_{201} have the abovementioned meaning and R_{501} is CF₂Cl in an inert solvent, for example toluene or benzene, at temperatures between 25 and 120°C (preferably 80-120°C) with tributyltin

hydride or 1,1,1,3,3,3-hexamethyl-2-(trimethylsilyl)trisilane in the presence of a catalytic amount of azo-isobutyronitrile and subsequently hydrolysing the resulting compound to give the compound of the formula XVIa in which R₅₀₁ is CHF₂.

Compounds of the formula XVIa in which R_{201} , R_{301} , R_{401} and R_{501} have the abovementioned meaning can also be prepared by reacting a compound of the formula Xc in which R_{14} , R_{301} , R_{401} and R_{501} have the abovementioned meaning and R_{201} is CH_2CI by nucleophilic substitution, for example with an alkali metal iodide in an inert solvent, to give the corresponding iodides, or by means of gaseous hydrobromic acid in lower carboxylic acids such as glacial acetic acid to give the corresponding bromine derivatives (for example in accordance with US-3974166) or by means of alkali metal fluoride in a dipolar solvent such as sulfolane to give the corresponding fluorine derivatives, or, to prepare an alkoxy radical Xd, by reacting a halogen derivative Xc with an alcohol or phenol in the presence of a base such as sodium hydride or an alkaline earth metal oxide or alkaline earth metal carbonate or directly with an alkali metal alkoxide in an inert solvent such as dimethylformamide or in an excess of the alcohol ROH which corresponds to the group to be introduced at temperatures between -5 and 160°C,

or, in order to prepare a corresponding aromatic or aliphatic thioether Xe, by reacting, analogously to what has been said above, either the halide Xc with an aliphatic or aromatic thiol in the presence of a base such as sodium hydride or with an alkali metal salt of a thiol in an inert solvent at -10 - 150°C, or, in order to prepare corresponding sulfinyl or sulfonyl derivatives Xe, by carrying out the reaction with an oxidant such as m-chloroperbenzoic acid or sodium periodate or sodium perborate, with the temperature control known in the art, depending on the degree of oxidation (for example -30°C - +50°C for n=1) or -20°C - +100°C for n=2) in an inert solvent such as dichloromethane to give Xf,

or, in order to prepare cyanomethylene derivatives of the formula Xg, by reacting a halide of the formula Xc with an alkali metal cyanide or tetraalkylammonium cyanide or copper cyanide in an inert solvent such as dichloromethane, tetrahydrofuran or dimethylformamide at temperatures between 0°C and 220°C.

The preparation of the compounds of the formula XVIa ($R_{501} = CF_2CI$) and of the intermediates of the formulae Xc, Xd, Xe, Xf, and Xg are illustrated in greater detail in the reaction schemes 5, 6 and 7 which follow.

Reaction scheme 5

$$R_{401}$$
 R_{401} R_{201} R_{2

Reaction scheme 6

$$\begin{array}{c} R_{401} \\ R_{201} \\ R_{201} \\ \end{array} \begin{array}{c} \text{inert solvent, e.g.} \\ \text{toluene} \\ \text{80-120°C} \\ \end{array} \\ \text{Cat. azo-isobutyronitrile } \\ F_2 \text{CIC} \\ Xa \ (R_{501} = \text{CF}_2 \text{CI}) \end{array} \begin{array}{c} \text{Inert solvent, e.g.} \\ \text{R}_{401} \\ \text{R}_{401} \\ \text{R}_{401} \\ \text{R}_{401} \\ \text{R}_{201} \\ \text{R}_{401} \\ \text{R}_{201} \\ \text{R}_$$

Reaction scheme 7

To prepare all other compounds of the formula X and XVI which are functionalized in accordance with the definition of R_{201} (Z- R_{15}) to R_{501} , a multiplicity of known standard methods are suitable, for example alkylation, halogenation, acylation, amidation, oximation, oxidation and reduction, the choice of the preparation methods which are suitable depending on the properties (reactivities) of the substituents in the intermediates.

The reactions to give compounds of the formula I are advantageously carried out in aprotic inert organic solvents. Such solvents are hydrocarbons such as benzene, toluene, xylene or cyclohexane, chlorinated hydrocarbons such as dichloromethane, trichloromethane, tetrachloromethane or chlorobenzene, ethers such as diethyl ether, ethylene glycol dimethyl ether, diethylene glycol dimethyl ether, tetrahydrofuran or dioxane, nitriles such as acetonitrile or propionitrile, amides such as N,N-dimethylformamide, diethylformamide or N-methylpyrrolidinone. The reaction temperatures are advantageously between -20°C and +120°C. In general, the reactions are slightly exothermic and, as a rule, they can be carried out at room temperature. To shorten the reaction time, or else to start the reaction, the mixture may be heated briefly to the boiling point of the reaction mixture. The reaction times can also be shortened by adding a few drops of base as reaction catalyst. Suitable bases are, in particular, tertiary amines such as trimethylamine, triethylamine, quinuclidine, 1,4-diazabicyclo[2.2.2]octane, 1,5-diazabicyclo[4.3.0]non-5-ene or 1,5-diazabicyclo-[5.4.0]undec-7-ene. However, inorganic bases such as hydrides, e.g. sodium hydride or calcium hydride, hydroxides, e.g. sodium hydroxide or potassium hydroxide, carbonates such as sodium carbonate and potassium carbonate, or hydrogen carbonates such as potassium hydrogen carbonate and sodium hydrogen carbonate, may also be used as bases. The compounds of the formula I can be isolated in the customary manner by concentrating and/or by evaporating the solvent and purified by recrystallization or trituration of the solid residue in solvents in which they are not readily soluble, such as ethers, aromatic hydrocarbons or chlorinated hydrocarbons.

All application methods which are conventionally used in agriculture, for example preemergence application, post-emergence application and seed treatment, as well as various methods and techniques, for example the controlled release of active ingredients, are suitable for the use according to the invention of the compounds of the formula I or of compositions comprising them. To this end, the active ingredient in solution is applied to mineral carriers for granules or to polymerized granules (urea/formaldehyde) and dried. If appropriate, an additional coating can be applied (coated granules), which allows the active ingredient to be released in a controlled manner over a specific period of time.

The compounds of the formula I can be employed as herbicides as such, i.e. as obtained from synthesis. However, they are preferably processed in the customary manner together with the auxiliaries conventionally used in the art of formulation, for example to give

emulsifiable concentrates, directly sprayable or dilutable solutions, dilute emulsions, wettable powders, soluble powders, dusts, granules or microcapsules. Such formulations are described, for example, in WO 97/34485 on pages 9 to 13. The application methods such as spraying, atomizing, dusting, wetting, scattering or pouring, as well as the type of composition, are chosen to suit the intended aims and the prevailing circumstances.

The formulations, i.e. the compositions, preparations or products which comprise the active ingredient of the formula I and, as a rule, one or more solid or liquid formulation auxiliaries are prepared in the known manner, for example by intimately mixing and/or grinding the active ingredients together with the formulation auxiliaries, for example solvents or solid carriers. Furthermore, surface-active compounds (surfactants) may additionally be used when preparing the formulations. Examples of solvents and solid carriers are indicated for example in WO 97/34485 on page 6.

Suitable surface-active compounds are, depending on the nature of the active ingredient of the formula I to be formulated, non-ionic, cationic and/or anionic surfactants and surfactant mixtures which have good emulsifying, dispersing and wetting properties.

Examples of suitable anionic, non-ionic and cationic surfactants are enumerated, for example, in WO 97/34485 on pages 7 and 8.

The surfactants conventionally used in the art of formulation which are described, inter alia, in "McCutcheon's Detergents and Emulsifiers Annual" MC Publishing Corp., Ridgewood New Jersey, 1981, Stache, H., "Tensid-Taschenbuch" ["Surfactants Guide"], Carl Hanser Verlag, Munich/Vienna, 1981, and M. and J. Ash, "Encyclopedia of Surfactants", Vol I-III, Chemical Publishing Co., New York, 1980-81, are furthermore also suitable for preparing the herbicidal compositions according to the invention.

As a rule, the herbicidal formulations comprise 0.1 to 99% by weight, in particular 0.1 to 95% by weight, of herbicide, 1 to 99.9% by weight, in particular 5 to 99.8% by weight, of a solid or liquid formulation auxiliary and 0 to 25% by weight, in particular 0.1 to 25% by weight, of a surfactant. While concentrated compositions are more preferred as commercially available goods, the end consumer uses, as a rule, dilute compositions. The compositions can also

comprise further additives such as stabilizers, for example epoxidized or non-epoxidized vegetable oils (epoxidized coconut oil, rapeseed oil or soya oil), antifoams, e.g. silicone oil, preservatives, viscosity regulators, binders, tackifiers and fertilizers or other active ingredients.

As a rule, the active ingredients of the formula I are applied to the plant or its environment at rates of 0.001 to 4 kg/ha, in particular 0.005 to 2 kg/ha. The dosage required for the desired action can be determined by experiments. It depends on the type of the action, the developmental stage of the crop plant and of the weed, and on the application (location, timing, method) and can, owing to these parameters, vary within wide limits.

The compounds of the formula I are distinguished by herbicidal and growth-inhibitory properties which allow them to be employed in crops of useful plants, in particular in cereals, cotton, soya, sugar beet, sugar cane, plantation crops, rapeseed, maize and rice and for the non-selective control of weeds. Crops are also to be understood as including those which have been rendered tolerant to herbicides or classes of herbicides by means of conventional plant breeding or by genetic engineering methods. The weeds to be controlled may be both mono- and dicotyledonous weeds such as Stellaria, Nasturtium, Agrostis, Digitaria, Avena, Setaria, Sinapis, Lolium, Solanum, Echinochloa, Scirpus, Monochoria, Sagittaria, Bromus, Alopecurus, Sorghum halepense, Rottboellia, Cyperus, Abutilon, Sida, Xanthium, Amaranthus, Chenopodium, Ipomoea, Chrysanthemum, Galium, Viola and Veronica.

The examples which follow illustrate the invention in greater detail without limiting it.

Preparation Examples:

Example H1: Preparation of 3-hydroxy-4,4-dimethyl-2-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohex-2-enone (compound A2-B24):

6.68 g (0.0305 mol) of methyl 2-methyl-6-trifluoromethylnicotinate (prepared as described in Heterocycles, 46, 129 (1997)) are dissolved in 250 ml of methanol/water (3:1 mixture), and 1.92 g (0.046 mol) of lithium hydroxide hydrate are added portionwise at a temperature of 22°C. After 4 hours at 22°C, the reaction mixture is poured onto ethyl acetate and 2 N hydrochloric acid, and the organic phase is washed three times with water, dried with sodium

sulfate and evaporated, and the residue is triturated with a small amount of hexane. After filtration, 5.69 g (90% of theory) of 2-methyl-6-trifluoromethylnicotinic acid of melting point 147-149°C are obtained.

The resulting 2-methyl-6-trifluoromethylnicotinic acid (1.026 g, 0.005 mol) is dissolved in 20 ml of oxalyl chloride. Three drops of dimethylformamide are added and the mixture is refluxed for 1 hour. The mixture is then concentrated on a rotary evaporator and the residue (2-methyl-6-trifluoromethylnicotinoyl chloride) is taken up in 100 ml of methylene chloride. At a temperature of 0°C, 1.6 ml (0.0115 mol) of triethylamine and 0.7 g (0.005 mol) of 4,4dimethylcyclohexane-1,3-dione are added. After 2 hours at a temperature of 22°C, the solvent is removed on a vacuum rotary evaporator, the residue which remains is dissolved in 55 ml of acetonitrile, and 0.15 ml (0.0016 mol) of acetone cyanohydrin and 0.79 ml (0.0057 mol) of triethylamine are added in order to subject the intermediate to a rearrangement reaction. After the reaction solution has been stirred for 4 hours at room temperature, it is evaporated. The syrup which remains is chromatographed on silica gel. Elution with a mixture of toluene, ethyl alcohol, dioxane, triethylamine and water (100:40:20:20:5 parts by volume) gives a pale yellow viscous oil (Rf = 0.39 on the abovementioned mixture as mobile phase), which is dissolved in dichloromethane and washed in succession with 75 ml of 5% hydrochloric acid and 75 ml of water. Evaporation to dryness of the organic solution which has been dried with Na₂SO₄ yields 1.05 g (63%) of pure 3-hydroxy-4,4-dimethyl-2-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohex-2enone in the form of white crystals of melting point 75-77°C.

¹H NMR (d₆-DMSO, δ in ppm): 1.342, s, 6H: 2.088, t, J 9Hz, 2H: 2.685, s, 3H: 2.982, t, J 9Hz, 2H:8.030, d, J 8.1Hz, IH: 8.094, d, (J, 8.1Hz), 1H.

Example H2: Preparation of 5-methyl-5-trifluoromethylcyclohexane-1,3-dione (compound H-B1066):

0.64 g of sodium were introduced into 40 ml of ethanol, and 3.23 ml of methyl acetoacetate and 4.9 g of isopropyl 4,4,4-trifluoro-3-methylbut-2-enoate were introduced, and the mixture was heated at the boil for 18 hours. After the mixture has been partitioned between dilute hydrochloric acid and ethyl acetate, the mixture is evaporated. The remaining unpurified methyl 2-methyl-4,6-dioxo-2-trifluoromethylcyclohexanecarboxylate is hydrolysed in a mixture of methanol and water at boiling point in the presence of 9.1 g of sodium hydroxide.

The mixture is subsequently acidified with hydrochloric acid and extracted with fresh ethyl acetate. After recrystallization (ethyl acetate), pure 5-methyl-5-trifluoromethylcyclohexane-1,3-dione of melting point 150-152°C is obtained.

Example H3: Preparation of methyl 2-hydroxy-1-methoxy-5-methyl-4-oxocyclohex-2-enecarboxylate (Example H-B1069):

A 30% solution of 35.8 g of sodium methoxide is introduced into 65 ml of dimethyl sulfoxide and, within 20 minutes, treated with a mixture of 16.7 g of 3-methyl-3-butene-2-one and 32.4 g of dimethyl methoxymalonate at a temperature of 30-35°C. The mixture is stirred for 1 hour at a temperature of 35°C, and is then acidified with hydrochloric acid and extracted repeatedly with dichloromethane. The organic phases are washed with water, dried and concentrated. Crystallization from hot ethyl acetate and hexane gives pure methyl 2-hydroxy1-methoxy-5-methyl-4-oxocyclohex-2-enecarboxylate of melting point 117-117.5°C.

Example H4: Preparation of methyl 2-hydroxy-1-methoxy-5-methyl-3-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)-4-oxocyclohex-2-enecarboxylate (compound A2-B1069):

2.23 g of fresh 2-methyl-6-trifluoromethylnicotinoyl chloride are added to a mixture of 2.14 g of methyl 2-hydroxy-1-methoxy-5-methyl-4-oxocyclohex-2-enecarboxylate and 2.02 g of triethylamine in 30 ml of acetonitrile. After approximately 30 minutes, 0.065 g of potassium cyanide is added and the mixture is stirred for 18 hours. At pH 2, the mixture is subsequently partitioned between water and ethyl acetate, dried over magnesium sulfate and evaporated. Filtration on silica gel (mobile phase ethyl acetate/methanol/triethylamine 85:10:5) gives the pure methyl 2-hydroxy-1-methoxy-5-methyl-3-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)-4-oxocyclohex-2-enecarboxylate as a viscous oil.

Example H5: Preparation of 3-hydroxy-4-methoxy-6-methyl-2-(2-methyl-6-trifluoromethyl-pyridine-3-carbonyl)cyclohex-2-enone (compound A2-B1070):

1.4 g of methyl 2-hydroxy-1-methoxy-5-methyl-3-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)-4-oxocyclohex-2-enecarboxylate in dioxane/water (5:3) are treated with 0.586 g of potassium hydroxide and the mixture is stirred for 3 hours. The mixture is then acidified (pH 3) and extracted with fresh ethyl acetate. The crude product is purified by chromatography analogously to Example H4. 3-Hydroxy-4-methoxy-6-methyl-2-(2-methyl-6-

trifluoromethyl-pyridine-3-carbonyl)cyclohex-2-enone is obtained as a viscous oil (according to ¹H-NMR as a mixture of 3 tautomeric forms).

Example H6: 5-Chloro-2,2,6,6-tetramethyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)-cyclohex-4-ene-1,3-dione (compound A2-B1105) and 6-[chloro-(2-methyl-6-trifluoromethyl-pyridin-3-yl)methylene]-2,2,4,4-tetramethylcyclohexane-1,3,5-trione:

7.0 g (55 mmol) of oxalyl chloride are introduced into 18.5 g (50 mmol) of 5-hydroxy-2,2,6,6-tetramethyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohex-4-ene-1,3-dione (compound A2-B354), dissolved in 50 ml of dichloromethane; 5 drops of dimethylformamide are added, and the mixture is slowly heated up to boiling point. After approximately 30 minutes, after the evolution of gas has ceased, the mixture is evaporated and the product is crystallized by adding n-hexane. The main product obtained is pure 5-chloro-2,2,6,6-tetramethyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohex-4-ene-1,3-dione, m.p. 119.5-120°C. Further HPLC-separation of the mother liquor using 5-10% ethyl acetate in hexane gives the isomer 6-[chloro-(2-methyl-6-trifluoromethylpyridine-3-yl)methylene]-2,2,4,4-tetramethylcyclohexane-1,3,5-trione, m.p. 92.5-93°C.

Example H7: 5-Chloro-2,2,6,6-tetramethyl-4-(2-methyl-1-oxy-6-trifluoromethylpyridine-3-carbonyl)cyclohex-4-ene-1,3-dione (compound A1210-B1105):

1.94 g (5 mmol) of 5-chloro-2,2,6,6-tetramethyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohex-4-ene-1,3-dione are treated in 20 ml of dichloroethane at a temperature of -10°C with 0.94 g (10 mmol) of hydrogen peroxide/urea adduct and 1.89 g (9 mmol) of trifluoroacetic anhydride. The reaction mixture is warmed to room temperature, with stirring, and held for a further 4 hours at this temperature. The mixture is then partitioned between ethyl acetate and water of pH 5, washed with sodium chloride solution and evaporated. The residue which is filtered through silica gel is pure 5-chloro-2,2,6,6-tetramethyl-4-(2-methyl-1-oxy-6-trifluoromethylpyridine-3-carbonyl)cyclohex-4-ene-1,3-dione of melting point 145.5-146°C.

Example H8: 4-(2-Bromomethyl-6-trifluoromethylpyridine-3-carbonyl)-5-chloro-2,2,6,6-tetramethylcyclohex-4-ene-1,3-dione (compound A1029-B1105):

0.39 g (1 mmol) of 5-chloro-2,2,6,6-tetramethyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohex-4-ene-1,3-dione and 0.20 g (1.1 mmol) of N-bromsuccinimide are refluxed in the presence of a catalytic amount of dibenzoyl peroxide in 10 ml of carbon tetrachloride. After the reaction has subsided, the resulting succinimide is removed by filtration and the crude product is purified by column chromatography (mobile phase: ethyl acetate/hexane 1:4). This gives pure 4-(2-bromomethyl-6-trifluoromethylpyridine-3-carbonyl)-5-chloro-2,2,6,6-tetramethylcyclohex-4-ene-1,3-dione of melting point 94.5-95°C.

Example H9: 2-(2-Acetoxymethyl-6-trifluoromethylpyridine-3-carbonyl)-4,4,6,6-tetramethyl-3,5-dioxocyclohex-1-enyl acetate (compound A1099-B1107):

0.4 g (1 mmol) of 5-chloro-2,2,6,6-tetramethyl-4-(2-methyl-1-oxy-6-trifluoromethylpyridine-3-carbonyl)cyclohex-4-ene-1,3-dione (Example H7) is refluxed for 25 minutes in the presence of 3 ml of acetic anhydride. The mixture is then concentrated and partitioned between ethyl acetate and sodium bicarbonate solution at pH 6.5. The crude product, separated on silica gel (mobile phase: ethyl acetate/hexane 1:4) yields the pure 2-(2-acetoxymethyl-6-trifluoromethylpyridine-3-carbonyl)-4,4,6,6-tetramethyl-3,5-dioxocyclohex-1-enyl acetate as an oil; ¹H-NMR (CDCl₃): 7.98 d, CH, 7.72 d, CH, 5.62 s, CH₂, 2.22 and 2.20 2x OAc, 1.58, s, 2x CH₃, 1.44 ppm, s, 2x CH₃.

Example H10: 5-Hydroxy-2-methyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)-bicyclo[4.1.0]hept-4-en-3-one (compound A2-D109) and 3-hydroxy-7-methyl-2-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohepta-2,6-dienone (compound A2-F5):

0.82 g (2 mmol) of ethyl trans-5-hydroxy-2-methyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)-3-oxobicyclo[4.1.0]hept-4-en-2-carboxylate (compound A2-D111)is stirred in a 2:1 mixture of dioxane/water together with 0.254 g (4.5 mmol) of potassium hydroxide at room temperature until all of the starting material is reacted. Then, ethyl acetate is added, the mixture is acidified to pH 3 using 4 N HCl, and the 2-phase mixture is then heated for approx. 1 hour at a temperature of 40°C. The aqueous phase which is saturated with sodium chloride is then separated off. The ethyl acetate extract is evaporated to dryness and the

product is chromatographed on silica gel (mobile phase ethyl acetate/hexane 1:2). The 1st fraction which is isolated is 3-hydroxy-7-methyl-2-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohepta-2,6-dienone as pure tautomer mixture, ¹H-NMR (CDCl₃): 17.72 and 17.08, 2s, OH, 7.6-7.45, 2 arom. H, 6.68 and 6.62, 2t, CH, 2.84, m, 2.63, m, 2.52, m, 4H, 2.62 and 2.54, 2s, CH₃, 2.03 and 1.77 ppm, 2s, CH₃. Subsequent elution with 100% ethyl acetate gives, as the 2nd fraction, the isomer and tautomer mixture of 5-hydroxy-2-methyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)bicyclo[4.1.0]hept-4-en-3-one, ¹H-NMR (CDCl₃): i.a. 17.62 and 17.48, 2s, OH, 7.6-7.45, 2 arom. H, 2.54, m, 2.48, 2s CH₃, 1.22 and 1.14, 2d, CH₃, 1.00 to 0.05 ppm, 2H.

Example H11: 5-Hydroxy-2-methanesulfinyl-2-methyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)bicyclo[4.1.0]hept-4-en-3-one (compound A2-D114):

0.87 g (2.3 mmol) of 5-hydroxy-2-methyl-2-methylsulfanyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)bicyclo[4.1.0]hept-4-en-3-one (compound A2-D113), dissolved in 8 ml of methanol, is warmed for 3 hours at a temperature of 50°C in the presence of 0.56 g of sodium periodate. The mixture is then partitioned between ethyl acetate and sodium chloride solution, concentrated, and the crude product is purified by chromatography (mobile phase: ethyl acetate/methanol 19:1). Pure 5-hydroxy-2-methanesulfinyl-2-methyl-4-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)bicyclo[4.1.0]hept-4-en-3-one is obtained as tautomer and isomer mixture of melting point 159.5-160°C.

Example H12: 2-Prop-2-ynyloxy-6-trifluoromethylnicotinic acid (compound A1025):

47 g (0.2 mol) of 2-oxo-6-trifluoromethyl-1,2-dihydropyridine-3-carboxylic acid, 20 ml (0.25 mol) of propargyl bromide and 43 g (0.31 mol) of potassium carbonate are heated to a temperature of 75°C in a mixture of 40 ml of dimethylformamide and 80 ml of acetonitrile in the presence of a catalytic amount of 18-crown-6 ether. After 5 hours, the mixture is partitioned between ethyl acetate and saturated sodium chloride solution. The crude product is filtered through a silica gel column using 15% ethyl acetate in hexane. The main component, which is obtained in the form of an oil, is the pure ethyl 2-prop-2-ynyloxy-6-trifluoromethylnicotinate; ¹H-NMR (CDCl₃): 8.31, d, CH, 7.38, d, CH, 5.13, d, CH₂, 4.41, q, CH₂, 2.48, t, CCH, 1.41 ppm, t, CH₃.

36.3 g (0.13 mol) of this product is stirred over a period of 16 hours with a solution of 11.5 g (0.17 mol) of potassium hydroxide in 50 ml of water and 50 ml of dioxane. After acidification and extraction with ethyl acetate, crystalline 2-prop-2-ynyloxy-6-trifluoromethylnicotinic acid is obtained; ¹H-NMR (CDCl₃): 10.0, b, OH, 8.53, d, CH, 7.44, d, CH, 5.22, d, CH₂, 2.54 ppm, t, CCH.

Example H13: 2-Methylthio-6-trifluoromethylnicotinic acid (compound A15):

9.4 g (40 mmol) of 2-oxo-6-trifluoromethyl-1,2-dihydropyridine-3-carboxylic acid are introduced into a 1-molar solution of 21.7 g of phosphorus tribromide (80 mmol) in dichloromethane at a temperature of 35°C. Then, the solvent is distilled off and the reaction mixture is heated slowly to boiling point, approx. 175°C. After 18 hours, the mixture is cooled to 0°C, diluted with dichloromethane and stirred with ice-water of pH 1.8. The organic phase is then washed with cold sodium carbonate solution and with 15% sodium chloride solution, dried over magnesium sulfate and concentrated. The residue is ethyl 2-bromo-6-trifluoromethylnicotinate in the form of an oil; ¹H-NMR (CDCl₃): 8.20, d, CH, 7.72 d, CH, 4.46, q, CH₂, 1.42 ppm, t, CH₃ of melting point 164-166°C.

1.0 g (3.4 mmol) of this product, dissolved in a small amount of acetonitrile, is heated for 45 minutes to a temperature of 70°C together with 0.26 g of sodium methanethiolate (3.4 mmol) in the presence of a catalytic amount of 15-crown-5 ether. The solution, which is cooled to room temperature, is then treated with 0.22 g (5.5 mmol) of sodium hydroxide and 5 ml of water, and stirring is continued for 3 hours. The neutral components are subsequently removed with a small amount of diethyl ether, and the aqueous phase is brought to pH 2.5 and extracted twice using ethyl acetate. This gives 2-methylthio-6-trifluoromethylnicotinic acid as crystalline product; ¹H-NMR (CDCl₃): 8.46, d, CH, 7.43, d, CH, 2.58 ppm, s, SCH₃.

Example H14: 2-Methanesulfonylamino-6-trifluoromethylnicotinic acid (compound A1203):

0.52 g of methanesulfonamide is introduced into a tetrahydrofuran suspension of 0.24 g of 55% sodium hydride in oil. After the evolution of hydrogen has ceased, 1.5 g (5 mmol) of ethyl 2-bromo-6-trifluoromethylnicotinate, 0.3 g (5.2 mmol) of potassium fluoride and a catalytic amount of crown ether and 5 ml of N-methylpyrrolidone are added and the mixture

is heated at the boil for 18 hours. The reaction mixture is then partitioned between ethyl acetate and water and freed from organic neutral constituents. The aqueous phase is brought to pH 2.9, extracted 3 times with fresh ethyl acetate, dried and concentrated. A crystalline product, ethyl 2-methanesulfonylamino-6-trifluoromethylnicotinate, is obtained from ether/hexane; ¹H-NMR (CDCl₃): 10.48, s, NH, 8.49, d, CH, 7.38, d, CH, 4.45, q, CH₂, 3.51, s, SO₂CH₃, 1.42 ppm, t, CH₃.

0.43 g (1.4 mmol) of the above product is hydrolysed at room temperature using a 1:1 solution of 0.22 g (3.9 mmol) of potassium hydroxide in dioxane/water. After the solution, which has been acidified to pH 2.5, has been extracted with ethyl acetate, 2-methanesulfonylamino-6-trifluoromethylnicotinic acid is obtained as crystallisate; ¹H-NMR (d₆-DMSO): 8.62, d, CH, 7.72, d, CH, 3.52 ppm, s, SO₂CH₃.

Example H15: (3-Methoxycarbonyl-6-trifluoromethylpyridin-2-ylmethyl)triphenylphosphonium bromide:

50 g (0.23 mol) of methyl 2-methyl-6-trifluoromethylnicotinate and 49 g (0.28 mol) of N-bromosuccinimide are heated for 90 minutes at 50°C in 500 ml of carbon tetrachloride in the presence of a catalytic amount of α , α -azaisobutyronitrile with illumination by a 150 watt lamp. Precipitated succinimide is filtered off, and the product methyl 2-bromomethyl-6-trifluoromethylnicotinate is then isolated as main component by means of column chromatography (mobile phase ethyl acetate/hexane 1:15), 1 H-NMR (CDCl₃): 4.01, s, 3H; 5.03, s, 2H; 7.72, d (J 8.2Hz), 1H; 8.43 ppm, d, (J 8.2Hz), 1H. 25.6 g (35 mmol) of the above product are taken up in toluene and treated with 10.6 g (40 mmol) of triphenylphosphine. After the mixture has been heated for 2 hours at boiling point, pure (3-methoxycarbonyl-6-trifluoromethylpyridine-2-ylmethyl)triphenylphosphonium bromide of melting point 215-217°C crystallizes out upon cooling.

Example H16: 2-Vinyl-6-trifluoromethylnicotinic acid (compound A21) and 2-(2,2-dichlorocyclopropyl)-6-trifluoromethylnicotinic acid (compound A1092):

5.7 g (10 mmol) of (3-methoxycarbonyl-6-trifluoromethylpyridine-2-ylmethyl)triphenyl-phosphonium bromide are dissolved at room temperature in a 2-phase system of 25 ml of chloroform and 2.1 g (20 mmol) of sodium carbonate and reacted, in 10 ml of water, with a

35% aqueous solution of 1.7 g (20 mmol) of formaldehyde. After 1.5 hours, the organic phase is separated off and filtered through silica gel. Methyl 2-vinyl-6-trifluoromethylnicotinate is obtained as an oil, ¹H-NMR (CDCl₃): 8.31, d, CH, 7.10, dd, CH, 7.09, d, CH, 6.68, dd, CH, 5.68, dd, CH, 3.97 ppm, s, OCH₃.

0.97 g (4.1 mmol) of this product is again taken up in chloroform and reacted with 6 ml of 50% sodium hydroxide solution with vigorous stirring in the presence of 90 mg of benzyltrimethylammonium bromide. After 20 hours, the organic phase is separated off, concentrated and purified by HPLC (mobile phase: ethyl acetate/hexane 1:4). This gives pure methyl 2-(2,2-dichlorocyclopropyl)-6-trifluoromethylnicotinate, ¹H-NMR (CDCl₃): 8.50, d, CH, 7.70, d, CH, 4.08, s, OCH₃, 3.68, dd, CH, 2.64, dd, CH, 2.05 ppm, dd, CH.

Hydrolysis of the above esters gives, accordingly, the 2-vinyl-6-trifluoromethylnicotinic acid, ¹H-NMR (CDCl₃): 8.40, d, CH, 7.22, dd, CH, 7.09, d, CH, 6.68, dd, CH, 5.58 ppm, dd, CH, and 2-(2,2-dichlorocyclopropyl)-6-trifluoromethylnicotinic acid, ¹H-NMR (CDCl₃): 8.64, d, CH, 7.23, d, CH, 3.78, dd, CH, 2,67, dd, CH, 2,08 ppm, dd, CH.

Example H17: 2-Propa-1,2-dienyl-6-trifluoromethylnicotinic acid (A1096) and 2-(3-chloro-propenyl)-6-trifluoromethylnicotinic acid (compound A1095).

6.7 g (11 mmol) of ((3-methoxycarbonyl-6-trifluoromethylpyridin-2-yl)methyl)triphenyl-phosphonium bromide are reacted with 2 ml of 45% aqueous chloroacetaldehyde solution (14 mmol) and 1.5 g (14 mmol) of sodium carbonate with vigorous stirring in a 2-phase system of 20 ml of chloroform and 7 ml of water. After 2 hours, the organic solution is separated off and washed with half-saturated sodium chloride solution. The product is separated on silica gel (mobile phase ethyl acetate/hexane 1:4). As the 1st fraction, methyl 2-propa-1,2-dienyl-6-trifluoromethylnicotinate, ¹H-NMR (CDCl₃): 7.62, m, CH, 7.55, d, CH, 7.32, d, CH, 7.04, d, CH, 7.02, m, CH, 3.98 ppm, s, OCH₃, is isolated, and methyl 2-(3-chloropropenyl)-6-trifluoromethylnicotinate, ¹H-NMR (CDCl₃): 8.85, d, CH, 7.65, dd, 7.58, d, CH, CH, 7.28, dd, CH, 4.32, d, CH₂Cl, 3.98 ppm, s, OCH₃ is isolated as the 2nd fraction.

Hydrolysis of the above esters gives 2-propa-1,2-dienyl-6-trifluoromethylnicotinic acid, m.p. 194-196°C, and 2-(3-chloropropenyl)-6-trifluoromethylnicotinic acid, m.p. 137-138°C.

Example H18: 2-Chloro-4-methyl-6-trifluoromethylnicotinic acid (compound A1205):

In a pressurized vessel, 7.5 g (0.03 mol) of ((3-ethoxycarbonyl)-4-methyl-6-trifluoromethyl)-pyrid-2-one is heated for 3 hours at a temperature of 170°C in the presence of 5.8 ml of phenyl dichlorophosphate. When cold, the reaction solution is filtered directly over a short silica gel column (mobile phase: ethyl acetate/hexane 1:9), and the 2-chloro-4-methyl-6-trifluoromethylpyridin-3-ylethyl ester is obtained as oily product. The latter is hydrolysed in the presence of aqueous potassium hydroxide solution in dioxane at a temperature of 40°C. After acidification to pH 2.7, extraction with ethyl acetate gives 2-chloro-4-methyl-6-trifluoromethylnicotinic acid as crystalline product: ¹H NMR (CDCl₃): 9.55, b, OH, 7.55, s, 1H; 3.80, s, CH₃, 2.56 ppm, s, CH₃.

Example H19: 4-Methyl-6-trifluoromethylnicotinic acid (compound A531):

To a suspension of 0.55 g of 10% Pd/C in 20 ml of methanol there are added 3.0 g (16.8 mmol) of the 2-chloro-4-methyl-6-trifluoromethylpyridin-3-ylethyl ester and, in 2 portions, a total of 5 g of ammonium formate, and the mixture is stirred for 24 hours at room temperature. The reaction mixture is then filtered through Celite and partitioned between ethyl acetate and sodium chloride solution. Chromatographic purification (mobile phase 1:9) gives the 4-methyl-6-trifluoromethylpyridin-3-ylethyl ester in the form of an oil: hydrolysis in accordance with the above processes gives 4-methyl-6-trifluoromethylnicotinic acid: ¹H NMR (CDCl₃): 9.32, s, 1H, 7.62, s, 1H, 2.79 ppm, s, CH₃.

Example H20: 5-Methyl-5-methylsulfanylbicyclo[4.1.0]heptane-2,4-dione (compound H-D113):

A 1-molar solution of 16.7 g (0.1 mol) of lithium bistrimethylsilylamide in tetrahydrofuran is added at a temperature of 0°C to a solution of 13.4 g (0.1 mol) of methyl 2-methylmercaptopropionate in 30 ml of tetrahydrofuran. After the mixture has been stirred for 1 hour, 11.8 g (0.1 mol) of 5-chloropent-3-en-2-one are added dropwise in the course of 20 minutes in such a way that the temperature can be maintained at 0°C. After the mixture has been stirred for a further 30 minutes, ice-water is added, and the mixture is acidified with hydrochloric acid and extracted with diethyl acetate. The crude product is chromatographed with ethyl acetate/hexane 15/85. This gives methyl 2-(2-acetylcyclopropyl)-2-

methylsulfanylpropionate, ¹H-NMR (CDCl₃): 3.74, s, OCH₃, 2.19 and 2.14, 2s, SCH₃, 2.12. and 2.00, 2s, CH₃, 2.2-1.9, 1H, 1.3, s, CH₃, 1.3 to 1.0 ppm, 2H, as a 3:7 isomer mixture.

2.45 g (11 mmol) of the above product, which is enriched in the more polar isomer, is heated with 4.5 g (25 mmol) of 30% sodium ethoxide solution in a mixture of toluene/dimethylformamide 19:1 for 90 minutes at 115°C. The mixture is then taken up in ethyl acetate and washed with dilute hydrochloric acid at pH 3. The residue which has been isolated is purified on silica gel (mobile phase ethyl acetate/hexane 1:2). This gives the isomer I of 5-methyl-5-methylsulfanylbicyclo[4.1.0]heptane-2,4-dione, ¹H-NMR (CDCl₃): 3.48, d, CH, 3.00 d, CH, 2.21, m, CH, 1.94, m, CH, 1.86, s, CH₃, 1.57, s, CH₃, 1.44, m, CH, 1.04 ppm, m, CH.

The isomer II of 5-methyl-5-methylsulfanylbicyclo[4.1.0]heptane-2,4-dione, ¹H-NMR (CDCl₃): 3.78, d, CH, 3.14 d, CH, 2.22, m, CH, 1.93, m, CH, 2.08, s, CH₃, 1.58, s, CH₃, 1.6-1.4 ppm, 2H, is obtained from the product which is enriched in apolar isomers.

Example H21: 4-Methylcyclohept-4-ene-1,3-dione (compound H-F5):

1.0 g (5.4 mmol) of the 5-methyl-5-methylsulfanylbicyclo[4.1.0]heptane-2,4-dione isomers II is hydrogenated for 90 minutes under atmospheric pressure in 15 ml of methanol in the presence of 5 g Raney nickel. The mixture is concentrated and purified over silica gel (mobile phase ethyl acetate/hexane 1:1), and 4-methylcyclohept-4-ene-1,3-dione, ¹H-NMR (CDCl₃): 6.84, m, CH, 3.94, s, CH₂, 2.77, m, CH₂, 2,59, m, CH₂, 1.88 ppm, s, CH₃, is obtained as an oil.

Example H22: 2-Oxaspiro[4.5]decane-1,6,8-trione (compound H-E16):

A suspension of sodium hydride (55% in oil, 27.5 mmol) in 70 ml of anhydrous tetrahydrofuran is cooled to a temperature of -20°C, and a solution of 2-acylbutyrolactone (2.69 ml, 25 mmol) in 5 ml of tetrahydrofuran is subsequently added dropwise. After the reaction mixture has been stirred for 1 hour at this temperature, it is treated dropwise with a solution of methyl acrylate (4.5 ml, 50 mmol) in tetrahydrofuran at a temperature of -20°C. The reaction mixture is subsequently allowed to warm to room temperature and is stirred for 8 hours. The mixture is then poured into ice-water and acidified with 2 N hydrochloric acid to

pH 1. After extraction with ethyl acetate, drying over sodium sulfate and concentration in vacuo, the product is purified by flash chromatography (eluent: ethyl acetate/acetic acid 1:1). This gives 2-oxaspiro[4.5]decane-1,6,8-trione in the form of a white powder of melting point 145-148°C

Example H23: Spiro[2.5]octane-4,6-dione (compound H-C1):

3.4 g of sodium hydride (55% suspension in oil, 78.0 mmol) were introduced into 1 l of tert-butanol and the mixture was stirred for a few minutes at room temperature. Then, 2-acylbutyrolactone (100 g, 0.78 mol) is added and the reaction mixture is treated with methyl acrylate (67.2 g, 0.78 mmol) over a period of 3.5 hours at a temperature of approx. 30°C. The reaction mixture is taken up in diethyl ether and washed in succession with 75 ml of saturated NaH₂PO₄ solution, water and saturated sodium chloride solution, dried over sodium sulfate and concentrated. This gives 162 g of methyl 3-(3-acetyl-2-oxotetrahydrofuran-3-yl)propionate as colourless oil, which can be reacted further without purification.

2.0 g (9.3 mmol) of the above product and 2.1 g of sodium iodide (14.0 mmol) are dissolved in 10 ml of 1,3-dimethyl-2-imidazolidinone and the solution is heated for 3 hours at 210°C. After cooling, the reaction mixture is poured into dilute aqueous saturated NaH₂PO₄ solution and extracted with diethyl ether, dried over sodium sulfate and concentrated. This gives methyl 3-(1-acetylcyclopropyl)propionate as a colourless oil.

74.5 g of methyl 3-(1-acetylcyclopropyl)propionate (0.32 mol) are dissolved in 1 l of tetrahydrofuran and the solution is treated portionwise with 14.3 g of sodium hydride (55% suspension in oil, 0.32 mol) at room temperature. After 1 hour, the reaction mixture is diluted with 200 ml of dimethylformamide and warmed to 70°C. After 8 hours, tetrahydrofuran is removed in vacuo, and the residue is poured into 2 N hydrochloric acid and extracted with diethyl ether. The organic phase is dried over sodium sulfate and concentrated, and column chromatography over silica gel (methylene chloride:ethanol 9:1 as eluent) gives spiro[2.5]octane-4,6-dione in the form of white crystals of melting point 116-118°C. Example H24: 2-(4,6-Dimethoxypyrimidin-2-ylsulfanylmethyl)-6-trifluoromethylnicotinic acid (compound A1088):

2.0 g (7.89 mmol) of methyl 2-chloromethyl-6-trifluoromethylnicotinate (prepared analogously to Heterocycles, 46, 129 (1997) by heating methyl 4-chloro-3-oxobutyrate and 4-amino-1,1,1-trifluorobut-3-en-2-one in toluene in the presence of trifluoroacetic acid) are introduced into 30 ml of acetonitrile and 1.63 g (11.83 mmol) of K₂CO₃ and reacted with 1.49 g (8.67 mmol) of 4,6-dimethoxypyrimidin-2-thiol at room temperature. After 4 hours, the mixture is poured into ethyl acetate/water, the ethyl acetate phase is removed, and the aqueous phase is reextracted with ethyl acetate. The combined ethyl acetate phases are dried over sodium sulfate, concentrated and purified by recrystallization from ethyl acetate/hexane. This gives methyl 2-(4,6-dimethoxypyrimidin-2-ylsulfanylmethyl)-6-trifluoromethylnicotinate in the form of white crystals of melting point 123-124°C.

Hydrolysis of the above esters (analogously to Example H1) gives, accordingly, 2-(4,6-dimethoxypyrimidin-2-ylsulfanylmethyl)-6-trifluoromethylnicotinic acid in the form of white crystals of melting point 157-158 °C. ¹H-NMR (CDCl₃): 3.96, s, 6H; 3.99,s, 3H; 5.03, s, 2H; 5.72, s, 1H; 7.66,d (J, 8.1Hz),1H; 8.40 ppm, d (J, 8.1Hz),1H.

Example H25: 2-Cyanomethyl-6-trifluoromethylnicotinic acid (compound A1103):

2.0 g (7.89 mmol) of methyl 2-chloromethyl-6-trifluoromethylnicotinate and 565 mg (8.67 mmol) of potassium cyanide are reacted in 20 ml of acetonitrile/water mixture (1:1) in the presence of 270 mg of tetrabutylammonium hydrogen sulfate. After the reaction has ended, the mixture is poured into water and extracted with ethyl acetate. After the ethyl acetate phase has been dried over sodium sulfate and concentrated, the crude product is purified by means of HPLC (ethyl acetate: hexane as eluent). This gives 610 mg (32% of theory) of methyl 2-cyanomethyl-6-trifluoromethylnicotinate in the form of an oil. ¹H-NMR (CDCl₃): 3.96, s, 3H; 4.38, s, 2H; 7.72,d (J, 8.1Hz),1H; 8.48 ppm, d (J, 8.1Hz),1H.

Hydrolysis analogous to the methods already mentioned above yields 2-cyanomethyl-6-trifluoromethylnicotinic acid in the form of yellow crystals of melting point 152-153 °C. ¹H-NMR (CDCl₃): 4.18, s, 2H; 7.72,d (J, 8.1Hz),1H; 8.52 ppm, d (J, 8.1Hz),1H.

Example H26: 3-(6-Difluoromethyl-2-methylpyridine-3-carbonyl)-2-hydroxy-1-methyl-4-oxocyclohex-2-enecarboxylate (compound A124-B34):

200 mg (0.516 mmol) of methyl 3-[6-(chlorodifluoromethyl)-2-methylpyridine-3-carbonyl]-2-hydroxy-1-methyl-4-oxocyclohex-2-enecarboxylate (compound A94-B34) is heated for 3 hours at a temperature of 120°C in 8 ml of toluene in the presence of 0.18 ml (0.62 mmol) tris(trimethylsilyl)silane. The viscous residue which remains is chromatographed on silica gel. The pale yellow viscous oil which is obtained by eluting with a mixture of toluene, ethyl alcohol, dioxane, triethylamine and water (100:40:20:20:5 by volume) is dissolved in dichloromethane and washed in succession with aqueous hydrochloric acid and water. Evaporation of the organic solution which has been dried with Na₂SO₄ yields 140 mg (73%) of pure methyl 3-(6-difluoromethyl-2-methylpyridine-3-carbonyl)-2-hydroxy-1-methyl-4-oxocyclohex-2-enecarboxylate in the form of a pale yellow oil. ¹H-NMR (CDCl₃): 1.28, s, 3H; 1.79-1.97, m, 1H; 2.39-2.46, m,1H; 2.43, s, 3H; 2.69, dt (J, 19.2 and 4.8Hz),1H; 2.82-2.92, m,1H; 3.67, s, 3H; 6.55, t, (J, 55.5 Hz),1H; 7.43, d (J, 7.8Hz), 1H; 7.49, d (J, 7.8Hz), 1H; 17.20 ppm, br s, 1H.

Example H27:3-Hydroxy-2-(2-methyl-1-oxy-6-trifluoromethylpyridine-3-carbonyl)cyclohex-2-enone (compound A1210-B1):

16.1 g (0.054 mol) of 3-hydroxy-2-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohex-2-enone (Example A2-B1) and 10.2 g (0.11 mol) of urea/hydrogen peroxide complex are dissolved in 150 ml of methylene chloride, and 22.1 ml (0.162 mol) of trifluoroacetic anhydride are subsequently added dropwise at a temperature of 25°C. After the reaction mixture has been stirred for 14 hours at a temperature of 25°C, it is poured into ethyl acetate and water, and the organic phase is washed twice with water, dried with sodium sulfate and concentrated. The residue is chromatographed on silica gel (eluent: ethyl acetate/methanol 9/1). This gives 2.4 g (14%) of the desired product in the form of white crystals (m.p. 117-119°C). ¹H-NMR (d₆-DMSO): 1.98, m, 2H; 2.30, s, 3H; 2.60, t (J, 7.25Hz), 4H: 7.32, d (J, 9.8Hz), 1H; 7.92 ppm, d (J, 9.8Hz), 1H.

Example H28: 2-(2-Methyl-6-trifluoromethylpyridine-3-carbonyl)-3-phenylsulfanylcyclohex-2-enone (compound A2-B1102):

4.0 g (0.0134 mol) of 3-hydroxy-2-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohex-2-enone (compound A2-B1) are suspended in 25 ml of oxalyl chloride, and 0.1 ml of dimethylformamide is subsequently added dropwise. After the vigorous evolution of gas has ceased, the mixture is held for 1.5 hours at a bath temperature of 45°C and subsequently concentrated, and the residue (3-chloro-2-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)-cyclohex-2-enone) is dissolved in 60 ml of methylene chloride. Triethylamine (3.7 ml, 0.0268 mol), dimethylaminopyridine (160 mg, 1.34 mmol) and 1.5 ml (0.0147 mol) of thiophenol are added at a temperature of 0-5°C. After 20 hours at a temperature of 22°C, the reaction mixture is concentrated and purified on silica gel (hexane/ethyl acetate 5:1). Trituration in hexane gives pure 2-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)-3-phenylsulfanylcyclohex-2-enone in the form of white crystals of melting point 124-125 °C. ¹H-NMR (CDCl₃): 1.99, m, 2H; 2.41, m 4H; 2.80, s, 3H; 2.60: 7.40-7.60, m, 6H; 7.80 ppm, d (J, 8.2Hz), 1H.

<u>Example H29: 3-Benzenesulfonyl-2-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)cyclohex-2-enone (compound A2-B1104):</u>

0.8 g (0.00204 mol) of the 2-(2-methyl-6-trifluoromethylpyridine-3-carbonyl)-3-phenylsulfanylcyclohex-2-enone obtained above is dissolved in 30 ml of methylene chloride, and 1.39 ml of peracetic acid (39% in acetic acid, 0.00816 mol) are subsequently added dropwise at a temperature of 25°C. After 4 hours at 25°C, the reaction mixture is poured into ethyl acetate and water, the organic phase is washed with water, dried with sodium sulfate and concentrated, and the residue is triturated with a small amount of hexane and ethyl acetate. Filtration gives 0.72 g (84% of theory) of 3-benzenesulfonyl-2-(2-methyl-6-trifluoromethyl-pyridine-3-carbonyl)cyclohex-2-enone in the form of white crystals of melting point 165-167°C. ¹H-NMR (CDCl₃): 2.30, m, 2H; 2.55, t (J, 7Hz), 2H; 2.71, m, 2H; 3.05, s, 3H; : 7.40-7.80, m, 4H; 7.80-8.05 ppm, m, 3H.

Example H30: 6-Difluoromethyl-2-methylnicotinic acid (compound A124):

6.1g (0.026 mol) of methyl 6-(chlorodifluoromethyl)-2-methylnicotinate (prepared analogously to Heterocycles, 46, 129 (1997) by heating methyl 3-oxobutyrate and 4-amino-1-chloro-1,1-difluorobut-3-en-2-one in toluene in the presence of trifluoroacetic acid) is heated at a temperature of 120°C in the presence of 430 mg (0.26 mol) of tris(trimethylsilyl)silane in 150 ml of toluene. After 1.5 hours, the reaction mixture is concentrated and purified on silica gel (hexane/ethyl acetate 13:1). This gives 3.8 g (73% of theory) of methyl 6-difluoromethyl-2-methylnicotinate as colourless oil.

Hydrolysis of the above esters (analogously to Example H1) gives, accordingly, 6-difluoromethyl-2-methylnicotinic acid in the form of white crystals of melting point 135-136°C. ¹H-NMR (CDCl₃): 2.68, s, 3H; 6.583, t (J, 55.2Hz), 1H;: 7.54, d (J, 8.1Hz), 1H; 7.54 ppm, d (J, 8.1Hz), 1H.

Example H31: 6-(Chlorodifluoromethyl)-2-methylnicotinic acid (compound A-94):

5.0 g (18.62 mmol) of methyl 2-methyl-6-trichloromethylnicotinate (prepared analogously to Heterocycles, 46, 129 (1997)) are cooled to a temperature of -40°C in a pressurized container, and 35 g (1.75 mol) of distilled hydrofluoric acid are subsequently passed in at this temperature. The mixture is heated for 10 hours at 200°C (pressure approx. 55 bar). After cooling, the pressure is released using a gas-washing system, HF is removed by suction, and the reaction mixture is poured into ethyl acetate/ice. The ethyl acetate phase is separated off, and the aqueous phase is reextracted using ethyl acetate. The combined ethyl acetate phases are washed with water, dried over sodium sulfate and concentrated, and the residue is triturated with a small amount of hexane and ethyl acetate. Filtration gives 2.2 g (53% of theory) of 6-chlorodifluoromethyl-2-methylnicotinic acid as pale green crystals of melting point 134-135°C.

¹H-NMR (CDCl₃): 2.987, s, 3H; 7.64,d (J, 8.1Hz), 1H; 8.513 ppm, d (J, 8.1Hz),1H.

Example H32: 2-[2-(4,6-Dimethoxypyrimidine-2-sulfonylmethyl)-6-trifluoromethylpyridine-3-carbonyl]-3-hydroxycyclohex-2-enone (compound A1090-B1):

100 mg of 2-[2-(4,6-dimethoxypyrimidin-2-ylsulfanylmethyl)-6-trifluoromethylpyridine-3-carbonyl]-3-hydroxycyclohex-2-enone (compound A1088-B1) are dissolved in methylene chloride, and 0.3 ml of peracetic acid (39% in acetic acid) is subsequently added dropwise at a temperature of 25°C. After 15 hours at 25°C, the reaction mixture is poured into ethyl acetate and water, and the organic phase is washed with water, dried with sodium sulfate and concentrated. This gives 95 mg of 2-[2-(4,6-dimethoxypyrimidine-2-sulfonylmethyl)-6-

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trifluoromethylpyridine-3-carbonyl]-3-hydroxycyclohex-2-enone in the form of a resin. 1 H-NMR (CDCl₃): 3.79, s, 6H; 3.91, s, 3H; 4.99, s, 2H; 6.09, s, 1H; 7.52, d (J, 9Hz),1H; 7.68 ppm, d (J, 9Hz),1H.

In the tables which follow, Ph is the phenyl group and CC an ethyne group. Table 1: Compounds of the formula XVId:

Comp. No.	R_2	R_3	R_4	R_5	p
A1	н	Н	н	CF₃	0
A2	CH ₃	Н	Н	CF ₃	0
АЗ	CH₃CH₂	Н	Н	CF ₃	0
A4	(CH₃)₂CH	Н	Н	CF ₃	0
A 5	(CH₃)₃C	Н	Н	CF ₃	0
A6	cyclopropyl	Н	Н	CF ₃	0
A7	$CH_3(CH_2)_2$	Н	Н	CF ₃	0

Comp. No.	R_2	R ₃	R ₄	R_5	р
A8	CH₃OCH₂	Н	Н	CF ₃	0
A9	CH ₃ O(CH ₂) ₂	Н	н	CF ₃	0
A10	Ph	Н	Н	CF ₃	0
A11	PhO	Н	Н	CF ₃	0
A12	PhS	Н	Н	CF ₃	0
A13	PhSO	Н	н	CF ₃	0
A14	PhSO ₂	Н	Н	CF ₃	0
A15	CH₃S	Н	Н	CF ₃	0
A16	CH₃SO	Н	Н	CF ₃	0
A17	CF ₃	Н	Н	CF ₃	0
A18	F₂CH	Н	Н	CF₃	0
A19	HCC	Н	Н	CF ₃	0
A20	CH₃CC	Н	н	CF ₃	0
A21	CH ₂ =CH	Н	н	CF ₃	0
A22	CH ₂ =CHCH ₂	Н	Н	CF ₃	0
A23	CH ₃ SO ₂ N(CH ₃)	Н	н	CF ₃	0
A24	(CH ₃)₂N	Н	Н	CF ₃	0
A25	$(CH_3)_2NSO_2$	Н	H	CF ₃	0
A26	CICH ₂	Н	Н	.CF ₃	0
A27	CH₃SCH₂	Н	Н	CF ₃	0
A28	CH ₃ SOCH ₂	Н	Н	CF₃	0
A29	CH ₃ SO ₂ CH ₂	Н	Н	CF ₃	0
A30	[1.2.4]-triazol-1-ylmethyl	Н	Н	CF ₃	0
A31	CH₃	CF ₃	Н	CH ₃	0
A32	CH₃	CH ₃	Н	CF ₃	0
A33	Н	Н	Н	CF ₃ CF ₂	0
A34	CH ₃	Н	Н	CF ₃ CF ₂	0
A35	CH₃CH₂	Н	Н	CF ₃ CF ₂	0
A36	cyclopropyl	Н	Н	CF ₃ CF ₂	0
A37	(CH₃)₃C	Н	Н	CF ₃ CF ₂	0
A38	(CH₃)₂CH	Н	Н	CF ₃ CF ₂	0
A39	$CH_3(CH_2)_2$	Н	Н	CF ₃ CF ₂	0
A40	CH₃OCH₂	Н	Н	CF ₃ CF ₂	0

Comp. No.	R_2	R ₃	R_4	R_5	р
A41	CH ₃ O(CH ₂) ₂	Н	Н	CF ₃ CF ₂	0
A42	Ph	Н	Н	CF ₃ CF ₂	0
A43	PhO	Н	Н	CF ₃ CF ₂	0
A44	PhS	н	Н	CF ₃ CF ₂	0
A45	PhSO	н	Н	CF ₃ CF ₂	0
A46	PhSO ₂	н	Н	CF ₃ CF ₂	0
A47	CH₃S	Н	Н	CF ₃ CF ₂	0
A48	CH₃SO	Н	Н	CF ₃ CF ₂	0
A49	CF ₃	Н	Н	CF ₃ CF ₂	0
A50	F₂CH	Н	, Н	CF ₃ CF ₂	0
A51	HCC	Н	Н	CF ₃ CF ₂	0
A52	CH₃CC	Н	Н	CF ₃ CF ₂	0
A53	CH ₂ =CH	Н	Н	CF ₃ CF ₂	0
A54	CH ₂ =CHCH ₂	Н	Н	CF ₃ CF ₂	0
A55	CH ₃ SO ₂ N(CH ₃)	Н	Н	CF ₃ CF ₂	0
A56	(CH ₃)₂N	Н	Н	CF ₃ CF ₂	0
A57	$(CH_3)_2NSO_2$	Н	н	CF ₃ CF ₂	0
A58	CICH ₂	Н	Н	CF ₃ CF ₂	0
A59	CH₃SCH₂	Н	Н	CF ₃ CF ₂	0
A60	CH₃SOCH₂	Н	Н	CF ₃ CF ₂	0
A61	CH ₃ SO ₂ CH ₂	Н	Н	CF ₃ CF ₂	0
A62	[1.2.4]-triazol-1-ylmethyl	Н	Н	CF ₃ CF ₂	0
A63	Н	Н	Н	CF ₃ CF ₂ CF ₂	0
A64	CH₃	Н	Н	CF ₃ CF ₂ CF ₂	0
A65	CH₃CH₂	Н	Н	CF ₃ CF ₂ CF ₂	0
A66	cyclopropyl	Н	Н	CF ₃ CF ₂ CF ₂	0
A67	(CH₃)₃C	Н	Н	CF ₃ CF ₂ CF ₂	0
A68	(CH ₃)₂CH	Н	Н	CF ₃ CF ₂ CF ₂	0
A69	$CH_3(CH_2)_2$	Н	Н	CF ₃ CF ₂ CF ₂	0
A70	CH₃OCH₂	Н	Н	CF ₃ CF ₂ CF ₂	0
A71	$CH_3O(CH_2)_2$	Н	Н	CF ₃ CF ₂ CF ₂	0
A72	Ph	Н	Н	CF ₃ CF ₂ CF ₂	0
A73	PhO	Н	Н	CF ₃ CF ₂ CF ₂	0

Comp. No.	R ₂	R ₃	R_4	R_5	р
A74	PhS	н	н	CF ₃ CF ₂ CF ₂	0
A75	PhSO	Н	Н	CF ₃ CF ₂ CF ₂	0
A76	PhSO ₂	Н	Н	CF ₃ CF ₂ CF ₂	0
A77	CH₃S	Н	Н	CF ₃ CF ₂ CF ₂	0
A78	CH₃SO	Н	Н	CF ₃ CF ₂ CF ₂	0
A79	CF ₃	Н	Н	CF ₃ CF ₂ CF ₂	0
A80	F₂CH	Н	Н	CF ₃ CF ₂ CF ₂	0
A81	HCC	Н	Н	CF ₃ CF ₂ CF ₂	0
A82	CH₃CC	Н	Н	CF ₃ CF ₂ CF ₂	0
A83	CH₂=CH	Н	Н	CF ₃ CF ₂ CF ₂	0
A84	CH ₂ =CHCH ₂	Н	Н	CF ₃ CF ₂ CF ₂	0
A85	CH ₃ SO ₂ N(CH ₃)	Н	Н	CF ₃ CF ₂ CF ₂	0
A86	(CH ₃) ₂ N	Н	Н	CF ₃ CF ₂ CF ₂	0
A87	$(CH_3)_2NSO_2$	Н	Н	CF ₃ CF ₂ CF ₂	0
A88	CICH₂	Н	Н	CF ₃ CF ₂ CF ₂	0
A89	CH ₃ SCH ₂	Н	Н	CF ₃ CF ₂ CF ₂	0
A90	CH₃SOCH₂	Н	Н	CF ₃ CF ₂ CF ₂	0
A91	CH ₃ SO ₂ CH ₂	Н	Н	CF ₃ CF ₂ CF ₂	0
A92	[1.2.4]-triazol-1-ylmethyl	Н	Н	CF ₃ CF ₂ CF ₂	0
A93	Н	Н	Н	CF ₂ CI	0
A94	CH ₃	Н	Н	CF ₂ Cl	0
A95	CH₃CH₂	Н	Н	CF ₂ CI	0
A96	cyclopropyl	Н	H	CF ₂ CI	0
A97	(CH₃)₃C	Н	Н	CF ₂ Cl	0
A98	(CH₃)₂CH	Н	Н	CF ₂ Cl	0
A99	$CH_3(CH_2)_2$	Н	Н	CF₂CI	0
A100	CH₃OCH₂	Н	Н	CF ₂ Cl	0
A101	CH ₃ O(CH ₂) ₂	Н	Н	CF ₂ CI	0
A102	Ph	Н	Н	CF ₂ CI	0
A103	PhO	Н	Н	CF ₂ Cl	0
A104	PhS	Н	Н	CF ₂ Cl	0
A105	PhSO	Н	Н	CF ₂ Cl	0
A106	PhSO ₂	Н	Н	CF ₂ Cl	0

R_2	R_3	R ₄	R_{5}	р
CH₃S	н	н		0
CH₃SO	Н	Н	CF ₂ CI	0
CF ₃	Н	Н	CF ₂ Cl	0
F ₂ CH	Н	н	CF ₂ CI	0
HCC	н	Н	CF ₂ CI	0
CH₃CC	н	Н	CF ₂ CI	0
CH₂=CH	Н	Н	CF ₂ CI	0
CH ₂ =CHCH ₂	н	Н	CF ₂ Cl	0
CH ₃ SO ₂ N(CH ₃)	Н	Н	CF ₂ CI	0
$(CH_3)_2N$	Н	Н	CF ₂ Cl	0
$(CH_3)_2NSO_2$	Н	Н	CF ₂ Cl	0
CICH ₂	Н	Н	CF ₂ Cl	0
CH₃SCH₂	Н	Н	CF ₂ CI	0
CH ₃ SOCH ₂	Н	Н	CF ₂ Cl	0
CH ₃ SO ₂ CH ₂	Н	Н	CF ₂ CI	0
[1.2.4]-triazol-1-ylmethyl	Н	Н	CF₂Cl	0
н	Н	Н	CHF ₂	0
CH₃	Н	Н	CHF ₂	0
CH ₃ CH ₂	Н	Н	CHF ₂	0
cyclopropyl	н	Н	CHF ₂	0
(CH ₃) ₃ C	Н	Н	CHF ₂	0
(CH ₃) ₂ CH	Н	Н	CHF ₂	0
$CH_3(CH_2)_2$	Н	Н	CHF ₂	0
CH₃OCH₂	Н	Н	CHF ₂	0
CH ₃ O(CH ₂) ₂	Н	Н	CHF ₂	0
Ph	Н	н	CHF ₂	0
PhO	Н	Н	CHF ₂	0
PhS	Н	Н	CHF ₂	0
PhSO	Н	Н	CHF ₂	0
PhSO ₂	Н	Н	CHF ₂	0
CH₃S	Н	Н	CHF ₂	0
CH₃SO	Н	Н	CHF ₂	0
CF ₃	Н	Н	CHF ₂	0
	CH ₃ SO CF ₃ F ₂ CH HCC CH ₃ CC CH ₂ =CH CH ₂ =CHCH ₂ CH ₃ SO ₂ N(CH ₃) (CH ₃) ₂ N (CH ₃) ₂ NSO ₂ CICH ₂ CH ₃ SOCH ₂ CH ₃ SOCH ₂ CH ₃ SO ₂ CH ₂ [1.2.4]-triazol-1-ylmethyl H CH ₃ CH ₃ CH ₂ cyclopropyl (CH ₃) ₃ C (CH ₃) ₂ CH CH ₃ (CH ₂) ₂ CH ₃ OCH ₂ CH ₃ SO CH ₃ S	CH ₃ SO H CF ₃ H F ₂ CH H HCC H CH ₃ CC H CH ₂ =CHCH ₂ H CH ₃ SO ₂ N(CH ₃) H (CH ₃) ₂ N H (CH ₃) ₂ NSO ₂ H CICH ₂ H CH ₃ SOCH ₂ H CH ₃ CH ₂ H CH ₃ OCH ₂ H CH ₃ SO H	CH ₃ SO	CH₃SO H H CF₂CI CH₃SO H H CF₂CI CF₃ H H CF₂CI CF₃ H H CF₂CI CH₃CC H H CF₂CI CH₂=CH H H CF₂CI CH₂=CHCH₂ H H CF₂CI CH₃SO₂N(CH₃) H H CF₂CI (CH₃)₂N H H CF₂CI (CH₃)₂NSO₂ H H CF₂CI CH₃SCH₂ H H CF₂CI CH₃SCH₂ H H CF₂CI CH₃SO₂CH₂ H H CF₂CI CH₃SO₂CH₂ H H CF₂CI [1.2.4]-triazol-1-ylmethyl H H CF₂CI CH₃SO₂CH₂ H H CH₅² CH₃ H H CH₅² CH₃Cl₂ H H CH₅² CH₃Cl₂ H H CHҕ² CH₃

Comp. No.	R_2	R_3	R_4	R ₅	р
A140	F ₂ CH	Н	Н	CHF ₂	0
A141	HCC	Н	Н	CHF ₂	0
A142	CH₃CC	Н	Н	CHF ₂	0
A143	CH₂=CH	Н	Н	CHF ₂	0
A144	CH ₂ =CHCH ₂	Н	Н	CHF ₂	0
A145	CH ₃ SO ₂ N(CH ₃)	Н	Н	CHF ₂	0
A146	(CH₃)₂N	Н	Н	CHF ₂	0
A147	$(CH_3)_2NSO_2$	Н	Н	CHF ₂	0
A148	CICH ₂	Н	Н	CHF ₂	0
A149	CH₃SCH₂	Н	Н	CHF ₂	0
A150	CH₃SOCH₂	Н	Н	CHF ₂	0
A151	CH ₃ SO ₂ CH ₂	Н	Н	CHF ₂	0
A152	[1.2.4]-triazol-1-ylmethyl	Н	Н	CHF ₂	0
A153	Н	Н	Н	CCl₃	0
A154	CH₃	Н	н	CCI ₃	0
A155	CH₃CH₂	Н	Н	CCI ₃	0
A156	cyclopropyl	Н	Н	CCI ₃	0
A157	(CH ₃) ₃ C	Н	Н	CCI ₃	0
A158	(CH ₃) ₂ CH	Н	Н	CCI ₃	0
A159	$CH_3(CH_2)_2$	Н	Н	CCI ₃	0
A160	CH₃OCH₂	Н	Н	CCI ₃	0
A161	$CH_3O(CH_2)_2$	Н	Н	CCI ₃	0
A162	Ph	Н	Н	CCI ₃	0
A163	PhO	Н	Н	CCI ₃	0
A164	PhS	Н	Н	CCI ₃	0
A165	PhSO	Н	Н	CCI ₃	0
A166	PhSO ₂	Н	Н	CCl ₃	0
A167	CH₃S	Н	Н	CCI ₃	0
A168	CH₃SO	Н	Н	CCI ₃	0
A169	CF ₃	Н	Н	CCI ₃	0
A170	F ₂ CH	Н	Н	CCI ₃	0
A171	HCC	н	Н	CCI ₃	0
A172	CH₃CC	Н	Н	CCI ₃	0

Comp. No.	R_2	R ₃	R_4	R_5	р
A173	CH ₂ =CH	Н	н	CCI ₃	0
A174	CH ₂ =CHCH ₂	Н	Н	CCl₃	0
A175	CH ₃ SO ₂ N(CH ₃)	Н	Н	CCl₃	0
A176	$(CH_3)_2N$	H	Н	CCI ₃	0
A177	$(CH_3)_2NSO_2$	Н	н	CCI ₃	0
A178	CICH ₂	Н	Н	CCI ₃	0
A179	CH₃SCH₂	Н	Н	CCI ₃	0
A180	CH₃SOCH₂	Н	Н	CCI ₃	0
A181	CH ₃ SO ₂ CH ₂	Н	Н	CCI ₃	0
A182	[1.2.4]-triazol-1-ylmethyl	Н	Н	CCI ₃	0
A183	Н	н	CH₃	CF ₃	0
A184	CH₃	Н	CH ₃	CF ₃	0
A185	CH₃CH₂	Н	CH ₃	CF ₃	0
A186	cyclopropyl	Н	CH ₃	CF ₃	0
A187	(CH₃)₃C	Н	CH ₃	CF ₃	0
A188	(CH₃)₂CH	Н	CH ₃	CF ₃	0
A189	$CH_3(CH_2)_2$	Н	CH ₃	CF ₃	0
A190	CH₃OCH₂	Н	CH ₃	CF ₃	0
A191	$CH_3O(CH_2)_2$	Н	CH₃	CF ₃	0
A192	Ph	Н	CH₃	CF ₃	0
A193	PhO	Н	CH₃	CF ₃	0
A194	PhS	Н	CH₃	CF ₃	0
A195	PhSO	Н	CH₃	CF ₃	0
A196	PhSO ₂	Н	CH₃	CF ₃	0
A197	CH₃S	Н	CH₃	CF ₃	0
A198	CH₃SO	Н	CH₃	CF ₃	0
A199	CF ₃	Н	CH ₃	CF ₃	0
A200	F ₂ CH	Н	CH₃	CF ₃	0
A201	HCC	Н	CH₃	CF ₃	0
A202	CH₃CC	Н	CH₃	CF ₃	0
A203	CH₂=CH	Н	CH ₃	CF ₃	0
A204	CH ₂ =CHCH ₂	Н	CH ₃	CF ₃	0
A205	CH₃SO₂N(CH₃)	Н	CH ₃	CF ₃	0

Comp. No.	R_2	R ₃	R ₄	R_5	р
A206	(CH ₃) ₂ N	н	CH₃	CF₃	0
A207	(CH ₃) ₂ NSO ₂	Н	СН₃	CF ₃	0
A208	CICH ₂	Н	CH ₃	CF ₃	0
A209	CH₃SCH₂	Н	CH ₃	CF₃	0
A210	CH ₃ SOCH ₂	Н	CH ₃	CF ₃	0
A211	CH ₃ SO ₂ CH ₂	Н	CH ₃	CF ₃	0
A212	н	Н	CH₃	CF ₃ CF ₂	0
A213	CH₃	Н	CH₃	CF ₃ CF ₂	0
A214	CH ₃ CH ₂	н	CH₃	CF ₃ CF ₂	0
A215	cyclopropyl	Н	CH₃	CF ₃ CF ₂	0
A216	$(CH_3)_3C$	Н	CH₃	CF ₃ CF ₂	0
A217	(CH ₃) ₂ CH	Н	CH₃	CF ₃ CF ₂	0
A218	CH ₃ (CH ₂) ₂	н	CH₃	CF ₃ CF ₂	0
A219	CH ₃ OCH ₂	Н	CH₃	CF ₃ CF ₂	0
A220	CH ₃ O(CH ₂) ₂	Н	CH₃	CF ₃ CF ₂	0
A221	Ph	Н	CH ₃	CF ₃ CF ₂	0
A222	PhO	Н	CH₃	CF ₃ CF ₂	0
A223	PhS	Н	CH₃	CF ₃ CF ₂	0
A224	PhSO	Н	CH ₃	CF ₃ CF ₂	0
A225	PhSO ₂	Н	CH ₃	CF ₃ CF ₂	0
A226	CH₃S	Н	CH₃	CF ₃ CF ₂	0
A227	CH₃SO	Н	CH ₃	CF ₃ CF ₂	0
A228	CF₃	Н	CH ₃	CF ₃ CF ₂	0
A229	F₂CH	Н	CH ₃	CF ₃ CF ₂	0
A230	HCC	Н	CH ₃	CF ₃ CF ₂	0
A231	CH₃CC	Н	CH ₃	CF ₃ CF ₂	0
A232	CH₂=CH	Н	CH ₃	CF ₃ CF ₂	0
A233	CH ₂ =CHCH ₂	Н	CH ₃	CF ₃ CF ₂	0
A234	$CH_3SO_2N(CH_3)$	Н	CH ₃	CF ₃ CF ₂	0
A235	(CH₃)₂N	H	CH ₃	CF ₃ CF ₂	0
A236	$(CH_3)_2NSO_2$	Н	CH ₃	CF ₃ CF ₂	0
A237	CICH ₂	Н	CH ₃	CF ₃ CF ₂	0
A238	CH₃SCH₂	Н .	CH₃	CF₃CF₂	0

Comp. No.	R_2	R₃	R ₄	R_5	р
A239	CH₃SOCH₂	Н	CH₃	CF₃CF₂	0
A240	CH ₃ SO ₂ CH ₂	н	CH₃	CF ₃ CF ₂	0
A241	Н	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A242	CH₃	Н	СН₃	CF ₃ CF ₂ CF ₂	0
A243	CH₃CH₂	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A244	cyclopropyl	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A245	$(CH_3)_3C$	н Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A246	(CH ₃) ₂ CH	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A247	$CH_3(CH_2)_2$	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A248	CH ₃ OCH ₂	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A249	$CH_3O(CH_2)_2$	н	СН₃	CF ₃ CF ₂ CF ₂	0
A250	Ph	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A251	PhO	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A252	PhS	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A253	PhSO	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A254	PhSO ₂	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A255	CH₃S	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A256	CH₃SO	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A257	CF ₃	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A258	F₂CH	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A259	HCC	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A260	CH₃CC	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A261	CH ₂ =CH	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A262	CH ₂ =CHCH ₂	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A263	CH ₃ SO ₂ N(CH ₃)	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A264	(CH₃)₂N	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A265	$(CH_3)_2NSO_2$	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A266	CICH ₂	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A267	CH₃SCH₂	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A268	CH₃SOCH₂	Н	CH ₃	CF ₃ CF ₂ CF ₂	0
A269	CH ₃ SO ₂ CH ₂	Н	CH₃	CF ₃ CF ₂ CF ₂	0
A270	Н	Н	CH ₃	CF ₂ CI	0
A271	CH₃	Н	CH ₃	CF ₂ Cl	0

Comp. No.	R_2	R_3	R_4	R ₅	р
A272	CH₃CH₂	Н	CH₃	CF₂Cl	0
A273	cyclopropyl	Н	CH₃	CF₂CI	0
A274	$(CH_3)_3C$	Н	CH₃	CF ₂ CI	0
A275	(CH ₃) ₂ CH	Н	CH₃	CF₂CI	0
A276	$CH_3(CH_2)_2$	Н	CH₃	CF ₂ Cl	0
A277	CH ₃ OCH ₂	Н	CH₃	CF ₂ Cl	0
A278	$CH_3O(CH_2)_2$	н	CH₃	CF ₂ Cl	0
A279	Ph	Н	CH₃	CF ₂ Cl	0
A280	PhO	Н	СН₃	CF ₂ CI	0
A281	PhS	Н	СН₃	CF₂CI	0
A282	PhSO	Н	СН₃	CF₂CI	0
A283	PhSO ₂	Н	CH₃	CF₂CI	0
A284	CH₃S	Н	CH₃	CF₂CI	0
A285	CH₃SO	Н	СН₃	CF₂CI	0
A286	CF ₃	Н	CH₃	CF₂CI	0
A287	F₂CH	Н	CH₃	CF₂CI	0
A288	HCC	Н	CH₃	CF₂CI	0
A289	CH₃CC	Н	CH₃	CF ₂ CI	0
A290	CH ₂ =CH	н	CH₃	CF ₂ CI	0
A291	CH ₂ =CHCH ₂	Н	CH₃	CF ₂ CI	0
A292	$CH_3SO_2N(CH_3)$	Н	CH₃	CF ₂ CI	0
A293	$(CH_3)_2N$	Н	СН₃	CF ₂ CI	0
A294	$(CH_3)_2NSO_2$	Н	CH₃	CF ₂ Cl	0
A295	CICH ₂	Н	CH₃	CF ₂ CI	0
A296	CH₃SCH₂	Н	CH₃	CF ₂ CI	0
A297	CH ₃ SOCH ₂	Н	CH₃	CF ₂ CI	0
A298	CH ₃ SO ₂ CH ₂	Н	CH₃	CF₂CI	0
A299	Н	Н	CH₃	CHF ₂	0
A300	CH₃	Н	СН₃	CHF ₂	0
A301	CH ₃ CH ₂	Н	СН₃	CHF ₂	0
A302	cyclopropyl	Н	CH₃	CHF ₂	0
A303	(CH ₃) ₃ C	Н	CH₃	CHF ₂	0
A304	(CH ₃) ₂ CH	Н	CH₃	CHF ₂	0

R_2	R ₃	R_4	R ₅	р
$CH_3(CH_2)_2$	Н	СН₃	CHF ₂	0
CH ₃ OCH ₂	н	CH₃	CHF ₂	0
CH ₃ O(CH ₂) ₂	Н	СН₃	CHF ₂	0
Ph	Н	CH₃	CHF ₂	0
PhO	Н	CH₃	CHF ₂	0
PhS	Н	CH₃	CHF ₂	0
PhSO	Н	СН₃	CHF ₂	0
PhSO ₂	Н	CH₃	CHF ₂	0
CH₃S	Н	CH₃	CHF ₂	0
CH₃SO	Н	CH₃	CHF ₂	0
CF ₃	Н	CH₃	CHF ₂	0
F₂CH	н	CH₃	CHF ₂	0
HCC	н	CH₃	CHF ₂	0
CH₃CC	Н	CH₃	CHF ₂	0
CH ₂ =CH	н	СН₃	CHF ₂	0
CH ₂ =CHCH ₂	Н	CH₃	CHF ₂	0
CH₃SO₂N(CH₃)	Н	CH₃	CHF ₂	0
$(CH_3)_2N$	Н	CH₃	CHF ₂	0
$(CH_3)_2NSO_2$	Н	CH₃	CHF ₂	0
CICH ₂	Н	CH₃	CHF ₂	0
CH₃SCH₂	Н	CH₃	CHF ₂	0
CH₃SOCH₂	Н	CH ₃	CHF ₂	0
CH₃SO₂CH₂	Н	CH₃	CHF ₂	0
Н	Н	CH ₃	CCI ₃	0
CH₃	Н	CH ₃	CCI ₃	0
CH₃CH₂	Н	CH ₃	CCI ₃	0
(CH₃)₃C	Н	CH ₃	CCI ₃	0
(CH₃)₂CH	Н	CH ₃	CCI ₃	0
cyclopropyl	Н	CH ₃	CCI ₃	0
CH ₃ (CH ₂) ₂	Н	CH ₃	CCI ₃	0
CH₃OCH₂	Н	CH ₃	CCI ₃	0
$CH_3O(CH_2)_2$	Н	CH ₃	CCI ₃	0
Ph	Н	CH₃	CCl ₃	0
	CH ₃ (CH ₂) ₂ CH ₃ OCH ₂ CH ₃ O(CH ₂) ₂ Ph PhO PhS PhSO PhSO ₂ CH ₃ S CH ₃ SO CF ₃ F ₂ CH HCC CH ₂ =CH CC CH ₂ =CH CH ₂ =CHCH ₂ CH ₃ SO ₂ N(CH ₃) (CH ₃) ₂ N (CH ₃) ₂ N (CH ₃) ₂ N (CH ₃) ₂ NSO ₂ CICH ₂ CH ₃ SOCH ₂ CH ₃ SOCH ₂ CH ₃ SOCH ₂ CH ₃ CC CH CH ₃ CC CH CH CH CH CH CH CH	CH ₃ (CH ₂) ₂ H CH ₃ OCH ₂ H CH ₃ O(CH ₂) ₂ H Ph H PhO H PhS H PhSO H PhSO ₂ H CH ₃ SO H CF ₃ H CF ₃ H F ₂ CH H HCC H CH ₂ =CH CH CH ₂ =CH CH CH ₃ SO ₂ N(CH ₃) H (CH ₃) ₂ N H (CH ₃) ₂ N H (CH ₃) ₂ N CH CH ₃ SOCH ₂ H CH ₃ SOCH ₂ H CH ₃ SOCH ₂ H CH ₃ CC H CH ₃ CC H CH ₃ SOCH ₂ H CH ₃ CC H CH ₃ CC H CH ₃ CC H CH ₃ CC H CH ₃ SOCH ₂ H CH ₃ SOCH ₂ H CH ₃ SOCH ₂ H CH ₃ COCH ₂ H	CH₃(CH₂)₂ H CH₃ CH₃O(CH₂)₂ H CH₃ Ph H CH₃ PhO H CH₃ PhS H CH₃ PhSO H CH₃ PhSO₂ H CH₃ PhSO₂ H CH₃ CH₃S H CH₃ CH₃SO H CH₃ CF₃ H CH₃ F₂CH H CH₃ HCC H CH₃ CH₃CC H CH₃ CH₂=CH H CH₃ CH₂=CHCH₂ H CH₃ CH₂=CHCH₂ H CH₃ CH₂=CHCH₂ H CH₃ CH₃SO₂N(CH₃) H CH₃ CH₃SO₂N(CH₃) H CH₃ CH₃SO2P₂ H CH₃ CH₃SOCH₂ H CH₃ CH₃SO2CH₂ H CH₃ CH₃CH₂₂ H CH₃ CH₃CH₂₂ H CH₃ CH₃CH₂ H CH₃ C	CH₃(CH₂)₂ H CH₃ CHF₂ CH₃O(CH₂)₂ H CH₃ CHF₂ CH₃O(CH₂)₂ H CH₃ CHF₂ Ph H CH₃ CHF₂ PhO H CH₃ CHF₂ PhS H CH₃ CHF₂ PhSO H CH₃ CHF₂ PhSO₂ H CH₃ CHF₂ CH₃S H CH₃ CHF₂ CH₃SO H CH₃ CHF₂ CH₃ CH CH₃ CHF₂ CH₂ CH CH₃ CHF₂ CH₃ CH₃ CH₃ CHF₂ CH₃ CH₃ CH₃ CHF₂ CH₃ CH₃ CH

Comp. No.	R₂	R ₃	D	D	_
A338	PhO		R ₄	R₅	p
A339		H	CH₃	CCl ₃	0
	PhS	Н	CH₃	CCI ₃	0
A340	PhSO	H 	CH₃	CCI ₃	0
A341	PhSO ₂	Н	CH₃	CCI₃	0
A342	CH₃S	Н	CH₃	CCI ₃	0
A343	CH₃SO	Н	CH₃	CCI ₃	0
A344	CF₃	Н	CH₃	CCI ₃	0
A345	F₂CH	Н	CH₃	CCI ₃	0
A346	HCC	Н	CH₃	CCI ₃	0
A347	CH₃CC	Н	CH₃	CCl ₃	0
A348	CH ₂ =CH	Н	CH₃	CCI ₃	0
A349	CH ₂ =CHCH ₂	H	CH₃	CCI ₃	0
A350	CH ₃ SO ₂ N(CH ₃)	Н	CH₃	CCI ₃	0
A351	$(CH_3)_2N$	Н	CH₃	CCI₃	0
A352	$(CH_3)_2NSO_2$	Н	CH₃	CCl₃	0
A353	CICH ₂	н	CH₃	CCI ₃	0
A354	CH ₃ SCH ₂	Н	CH₃	CCl₃	0
A355	CH ₃ SOCH ₂	Н	CH₃	CCI ₃	0
A356	CH ₃ SO ₂ CH ₂	Н	CH₃	CCI ₃	0
A357	Н	Н	Ph	CF ₃	0
A358	CH₃	Н	Ph	CF ₃	0
A359	CH₃CH₂	Н	Ph	CF ₃	0
A360	cyclopropyl	Н	Ph	CF₃	0
A361	$(CH_3)_3C$	Н	Ph	CF₃	0
A362	(CH₃)₂CH	Н	Ph	CF ₃	0
A363	$CH_3(CH_2)_2$	Н	Ph	CF ₃	0
A364	CH₃OCH₂	Н	Ph	CF ₃	0
A365	CH ₃ O(CH ₂) ₂	Н	Ph	CF₃	0
A366	Ph	Н	Ph .	CF ₃	0
A367	PhO	Н	Ph	CF₃	0
A368	PhS	Н	Ph	CF₃	0
A369	PhSO	Н	Ph	CF₃	0
A370	PhSO ₂	Н	Ph	CF₃	0
				•	

Comp. No.	R_2	R ₃	R ₄	R ₅	р
A371	CH₃S	Н	Ph	CF ₃	0
A372	CH₃SO	Н	Ph	CF ₃	0
A373	CF ₃	Н	Ph	CF ₃	0
A374	F₂CH	Н	Ph	CF ₃	0
A375	HCC	Н	Ph	CF ₃	0
A376	CH₃CC	Н	Ph	CF ₃	0
A377	CH ₂ =CH	н	Ph	CF ₃	0
A378	CH ₂ =CHCH ₂	Н	Ph	CF ₃	0
A379	CH ₃ SO ₂ N(CH ₃)	Н	Ph	CF ₃	0
A380	$(CH_3)_2N$	Н	Ph	CF ₃	0
A381	$(CH_3)_2NSO_2$	н	Ph	CF ₃	0
A382	CICH ₂	н	Ph	CF ₃	0
A383	CH₃SCH₂	Н	Ph	CF ₃	0
A384	CH ₃ SOCH ₂	н	Ph	CF ₃	0
A385	CH ₃ SO ₂ CH ₂	Н	Ph	CF ₃	0
A386	Н	Н	Ph	CF ₃ CF ₂	0
A387	CH₃	Н	Ph	CF ₃ CF ₂	0
A388	CH₃CH₂	Н	Ph	CF ₃ CF ₂	0
A389	cyclopropyl	Н	Ph	CF ₃ CF ₂	O
A390	(CH₃)₃C	Н	Ph	CF ₃ CF ₂	0
A391	(CH₃)₂CH	Н	Ph	CF ₃ CF ₂	0
A392	$CH_3(CH_2)_2$	Н	Ph	CF ₃ CF ₂	0
A393	CH₃OCH₂	Н	Ph	CF ₃ CF ₂	0
A394	$CH_3O(CH_2)_2$	Н	Ph	CF ₃ CF ₂	0
A395	Ph	Н	Ph	CF ₃ CF ₂	0
A396	PhO	Н	Ph	CF ₃ CF ₂	0
A397	PhS	Н	Ph	CF ₃ CF ₂	0
A398	PhSO	Н	Ph	CF ₃ CF ₂	0
A399	PhSO ₂	Н	Ph	CF ₃ CF ₂	0
A400	CH₃S	Н	Ph	CF ₃ CF ₂	0
A401	CH₃SO	н	Ph	CF ₃ CF ₂	0
A402	CF ₃	Н	Ph	CF ₃ CF ₂	0
A403	F₂CH	н	Ph	CF ₃ CF ₂	0

Comp. No.	R_2	R₃	$R_{\scriptscriptstyle{4}}$	R_5	р
A404	HCC	н	Ph	CF ₃ CF ₂	Q
A405	CH₃CC	Н	Ph	CF ₃ CF ₂	0
A406	CH ₂ =CH	Н	Ph	CF₃CF₂	0
A407	CH ₂ =CHCH ₂	Н	Ph	CF₃CF₂	0
A408	CH ₃ SO ₂ N(CH ₃)	H ·	Ph	CF₃CF₂	0
A409	$(CH_3)_2N$	Н	Ph	CF ₃ CF ₂	0
A410	(CH ₃) ₂ NSO ₂	Н	Ph	CF₃CF₂	0
A411	CICH ₂	Н	Ph	CF₃CF₂	0
A412	CH ₃ SCH ₂	Н	Ph	CF ₃ CF ₂	0
A413	CH₃SOCH₂	Н	Ph	CF₃CF₂	0
A414	CH ₃ SO ₂ CH ₂	Н	Ph	CF₃CF₂	0
A415	Н	Н	Ph	CF ₃ CF ₂ CF ₂	0
A416	CH ₃	Н	Ph	CF ₃ CF ₂ CF ₂	0
A417	CH ₃ CH ₂	Н	Ph	CF ₃ CF ₂ CF ₂	0
A418	cyclopropyl	Н	Ph	CF ₃ CF ₂ CF ₂	0
A419	$(CH_3)_3C$	Н	Ph	CF ₃ CF ₂ CF ₂	0
A420	(CH₃)₂CH	Н	Ph	CF ₃ CF ₂ CF ₂	0
A421	$CH_3(CH_2)_2$	Н	Ph	CF ₃ CF ₂ CF ₂	0
A422	CH₃OCH₂	Н	Ph	CF ₃ CF ₂ CF ₂	0
A423	$CH_3O(CH_2)_2$	н	Ph	CF ₃ CF ₂ CF ₂	0
A424	Ph	Н	Ph	CF ₃ CF ₂ CF ₂	0
A425	PhO	н	Ph	CF ₃ CF ₂ CF ₂	0
A426	PhS	Н	Ph	CF ₃ CF ₂ CF ₂	0
A427	PhSO	Н	Ph	CF ₃ CF ₂ CF ₂	0
A428	PhSO₂	Н	Ph	CF ₃ CF ₂ CF ₂	0
A429	CH₃S	Н	Ph	CF ₃ CF ₂ CF ₂	0
A430	CH₃SO	Н	Ph	CF ₃ CF ₂ CF ₂	0
A431	CF ₃	Н	Ph	CF ₃ CF ₂ CF ₂	0
A432	F ₂ CH	Н	Ph	CF ₃ CF ₂ CF ₂	0
A433	HCC	Н	Ph	CF ₃ CF ₂ CF ₂	0
A434	CH₃CC	Н	Ph	CF ₃ CF ₂ CF ₂	0
A435	CH₂=CH	Н	Ph	CF ₃ CF ₂ CF ₂	0
A436	CH ₂ =CHCH ₂	Н	Ph	CF ₃ CF ₂ CF ₂	0

Comp. No.	R_2	R ₃	R_4	R ₅	р
A437	CH ₃ SO ₂ N(CH ₃)	Н	Ph	CF ₃ CF ₂ CF ₂	0
A438	(CH ₃) ₂ N	Н	Ph	CF ₃ CF ₂ CF ₂	0
A439	$(CH_3)_2NSO_2$	Н	Ph	CF ₃ CF ₂ CF ₂	0
A440	CICH ₂	Н	Ph	CF ₃ CF ₂ CF ₂	0
A441	CH₃SCH₂	Н	Ph	CF ₃ CF ₂ CF ₂	0
A442	CH ₃ SOCH ₂	Н	Ph	CF ₃ CF ₂ CF ₂	0
A443	CH ₃ SO ₂ CH ₂	Н	Ph	CF ₃ CF ₂ CF ₂	0
A444	Н	Н	Ph	CF₂CI	0
A445	CH₃	Н	Ph	CF₂CI	0
A446	CH₃CH₂	Н	Ph	CF₂CI	0
A447	cyclopropyl	Н	Ph	CF ₂ CI	0
A448	(CH ₃) ₃ C	Н	Ph	CF ₂ CI	0
A449	(CH ₃) ₂ CH	Н	Ph	CF ₂ CI	0
A450	$CH_3(CH_2)_2$	Н	Ph	CF ₂ CI	0
A451	CH₃OCH₂	Н	Ph	CF ₂ CI	0
A452	$CH_3O(CH_2)_2$	Н	Ph	CF₂CI	0
A453	Ph	Н	Ph	CF ₂ Cl	0
A454	PhO	Н	Ph	CF ₂ CI	0
A455	PhS	Н	Ph	CF ₂ CI	0
A456	PhSO	Н	Ph	CF ₂ CI	0
A457	PhSO ₂	Н	Ph	CF ₂ CI	0
A458	CH₃S	Н	Ph	CF ₂ CI	0
A459	CH₃SO	Н	Ph	CF₂CI	0
A460	CF ₃	Н	Ph	CF ₂ CI	0
A461	F₂CH	Н	Ph	CF ₂ Cl	0
A462	HCC	Н	Ph	CF₂CI	0
A463	CH₃CC	Н	Ph	CF ₂ CI	0
A464	CH₂=CH	Н	Ph	CF ₂ CI	0
A465	CH ₂ =CHCH ₂	Н	Ph	CF ₂ Cl	0
A466	CH ₃ SO ₂ N(CH ₃)	Н	Ph	CF ₂ CI	0
A467	$(CH_3)_2N$	Н	Ph	CF ₂ CI	0
A468	$(CH_3)_2NSO_2$	Н	Ph	CF ₂ CI	0
A469	CICH ₂	Н	Ph	CF ₂ CI	0

Comp. No.	R_2	R₃	R_4	R_5	р
A470	CH₃SCH₂	Н	Ph	CF ₂ CI	0
A471	CH ₃ SOCH ₂	Н	Ph	CF ₂ Cl	0
A472	CH ₃ SO ₂ CH ₂	Н	Ph	CF ₂ Cl	0
A473	Н	Н	Ph	CHF ₂	0
A474	CH₃	Н	Ph	CHF ₂	0
A475	CH₃CH₂	Н	Ph	CHF ₂	0
A476	cyclopropyl	H	Ph	CHF ₂	0
A477	$(CH_3)_3C$	Н	Ph	CHF ₂	0
A478	(CH ₃) ₂ CH	Н	Ph	CHF ₂	0
A479	$CH_3(CH_2)_2$	Н	Ph	CHF ₂	0
A480	CH ₃ OCH₂	Н	Ph	CHF ₂	0
A481	$CH_3O(CH_2)_2$	Н	Ph	CHF ₂	0
A482	Ph	н	Ph	CHF ₂	0
A483	PhO	н	Ph	CHF ₂	0
A484	PhS	Н	Ph	CHF ₂	0
A485	PhSO	Н	Ph	CHF ₂	0
A486	PhSO ₂	Н	Ph	CHF ₂	0
A487	CH₃S	н	Ph	CHF ₂	0
A488	CH₃SO	H.	Ph	CHF ₂	0
A489	CF₃	н	Ph	CHF ₂	0
A490	F ₂ CH	Н	Ph	CHF ₂	0
A491	HCC	Н	Ph	CHF ₂	0
A492	CH₃CC	н	Ph	CHF ₂	0
A493	CH ₂ =CH	Н	Ph	CHF ₂	0
A494	CH ₂ =CHCH ₂	Н	Ph	CHF ₂	0
A495	CH ₃ SO ₂ N(CH ₃)	Н	Ph	CHF ₂	0
A496	(CH ₃)₂N	Н	Ph	CHF ₂	0
A497	$(CH_3)_2NSO_2$	Н	Ph	CHF ₂	0
A498	CICH ₂	н	Ph	. CHF ₂	0
A499	CH₃SCH₂	Н	Ph	CHF ₂	0
A500	CH ₃ SOCH ₂	н	Ph	CHF ₂	0
A501	CH₃SO₂CH₂	Н	Ph	CHF ₂	0
A502	н	Н	Ph	CCI ₃	0

Comp. No.	R_2	R_3	R_4	R ₅	р
A503	CH₃	Н	Ph	CCl₃	0
A504	CH ₃ CH ₂	Н	Ph	CCI ₃	0
A505	cyclopropyl	н	Ph	CCI ₃	0
A506	$(CH_3)_3C$	н	Ph	CCI ₃	0
A507	(CH ₃) ₂ CH	Н	Ph	CCI ₃	0
A508	$CH_3(CH_2)_2$	Н	Ph	CCI ₃	0
A509	CH ₃ OCH ₂	н	Ph	CCI ₃	0
A510	$CH_3O(CH_2)_2$	Н	Ph	CCI ₃	0
A511	Ph	Н	Ph	CCl ₃	0
A512	PhO	Н	Ph	CCI ₃	0
A513	PhS	Н	Ph	CCI ₃	0
A514	PhSO	н	Ph	CCI ₃	0
A515	PhSO ₂	н	Ph	CCI ₃	0
A516	CH₃S	Н	Ph	CCI ₃	0
A517	CH₃SO	Н	Ph	CCI ₃	0
A518	CF ₃	н	Ph	CCI ₃	0
A519	F₂CH	Н	Ph	CCI ₃	0
A520	HCC	Н	Ph	CCl₃	0
A521	CH₃CC	Н	Ph	CCI ₃	0
A522	CH ₂ =CH	Н	Ph	CCI ₃	ο
A523	CH ₂ =CHCH ₂	Н	Ph	CCI ₃	0
A524	$CH_3SO_2N(CH_3)$	Н	Ph	CCI ₃	0
A525	(CH₃)₂N	Н	Ph	CCI ₃	0
A526	$(CH_3)_2NSO_2$	Н	Ph	CCI ₃	0
A527	CICH ₂	Н	Ph	CCI ₃	0
A528	CH₃SCH₂	Н	Ph	CCI ₃	0
A529	CH₃SOCH₂	Н	Ph	CCI ₃	0
A530	CH₃SO₂CH₂	Н	Ph	CCl ₃	0
A531	Н	CH₃	Н	CF ₃	0
A532	н	CH ₃ CH ₂	Н	CF ₃	0
A533	Н	cyclopropyl	Н	CF ₃	0
A534	Н	(CH₃)₃CH	Н	CF ₃	0
A535	Н	(CH₃)₂CH	Н	CF ₃	0

Comp. No.	R_2	R_3	R_4	R_5	р
A536	Н	$CH_3(CH_2)_2$	Н	CF ₃	0
A537	Н	CH₃OCH₂	Н	CF ₃	0
A538	Н	CH ₃ O(CH ₂) ₂	Н	CF ₃	0
A539	Н	Ph	Н	CF ₃	0
A540	Н	PhO	Н	CF ₃	0
A541	Н	PhS	Н	CF ₃	0
A542	Н	PhSO	Н	CF ₃	0
A543	Н	PhSO ₂	Н	CF ₃	0
A544	Н	CH₃S	Н	CF ₃	0
A545	Н	CH₃SO	Н	CF ₃	0
A546	Н	CF ₃	Н	CF ₃	0
A547	Н	F ₂ CH	Н	CF₃	0
A548	н	HCC	Н	CF ₃	0
A549	Н	CH₃CC	Н	CF ₃	0
A550	Н	CH ₂ =CH	Н	CF ₃	0
A551	Н	CH ₂ =CHCH ₂	Н	CF ₃	0
A552	Н	$CH_3SO_2N(CH_3)$	Н	CF ₃	0
A553	Н	(CH₃)₂N	Н	CF ₃	0
A554	Н	$(CH_3)_2NSO_2$	Н	CF ₃	0
A555	Н	CH₃SCH₂	Н	CF ₃	0
A556	Н	CH₃SOCH₂	Н	CF ₃	0
A557	Н	CH ₃ SO ₂ CH ₂	Н	CF ₃	0
A558	Н	CH₃	Н	CF ₃ CF ₂	0
A559	Н	CH₃CH₂	Н	CF ₃ CF ₂	0
A560	Н	cyclopropyl	Н	CF ₃ CF ₂	0
A561	Н	(CH ₃) ₃ C	Н	CF ₃ CF ₂	0
A562	H	(CH ₃)₂CH	Н	CF ₃ CF ₂	0
A563	Н	$CH_3(CH_2)_2$	Н	CF ₃ CF ₂	0
A564	Н	CH ₃ OCH ₂	Н	CF ₃ CF ₂	0
A565	Н	CH ₃ O(CH ₂) ₂	Н	CF ₃ CF ₂	0
A566	н	Ph	Н	CF ₃ CF ₂	0
A567	Н	PhO	Н	CF ₃ CF ₂	0
A568	Н	PhS	H	CF ₃ CF ₂	0

Comp. No.	R_2	R_3	R_4	R ₅	р
A569	н	PhSO	Н	CF ₃ CF ₂	0
A570	Н	PhSO ₂	Н	CF ₃ CF ₂	0
A571	Н	CH₃S	Н	CF ₃ CF ₂	0
A572	н	CH₃SO	Н	CF ₃ CF ₂	0
A573	Н	CF ₃	Н	CF ₃ CF ₂	0
A574	н	F₂CH	Н	CF ₃ CF ₂	0
A575	н	HCC	Н	CF ₃ CF ₂	0
A576	Н	CH₃CC	Н	CF ₃ CF ₂	0
A577	Н	CH₂=CH	Н	CF ₃ CF ₂	0
A578	Н	CH ₂ =CHCH ₂	Н	CF ₃ CF ₂	0
A579	Н	CH ₃ SO ₂ N(CH ₃)	Н	CF ₃ CF ₂	0
A580	Н	(CH ₃) ₂ N	Н	CF ₃ CF ₂	0
A581	Н	$(CH_3)_2NSO_2$	Н	CF ₃ CF ₂	0
A582	Н	CH₃SCH₂	Н	CF ₃ CF ₂	0
A583	Н	CH₃SOCH₂	Н	CF ₃ CF ₂	0
A584	Н	CH ₃ SO ₂ CH ₂	H	CF ₃ CF ₂	0
A585	Н	CH₃	Н	CF ₃ CF ₂ CF ₂	0
A586	Н	CH₃CH₂	Н	CF ₃ CF ₂ CF ₂	0
A587	Н	cyclopropyl	Н	CF ₃ CF ₂ CF ₂	0
A588	Н	(CH₃)₃C	Н	CF ₃ CF ₂ CF ₂	0
A589	Н	(CH₃)₂CH	Н	CF ₃ CF ₂ CF ₂	0
A590	Н	$CH_3(CH_2)_2$	Н	CF ₃ CF ₂ CF ₂	0
A591	Н	CH₃OCH₂	Н	CF ₃ CF ₂ CF ₂	0
A592	Н	$CH_3O(CH_2)_2$	Н	CF ₃ CF ₂ CF ₂	0
A593	Н	Ph	Н	CF ₃ CF ₂ CF ₂	0
A594	Н	PhO	Н	CF ₃ CF ₂ CF ₂	0
A595	Н	PhS	Н	CF ₃ CF ₂ CF ₂	0
A596	Н	PhSO	Н	CF ₃ CF ₂ CF ₂	0
A597	Н	PhSO ₂	Н	CF ₃ CF ₂ CF ₂	0
A598	Н	CH₃S	Н	CF ₃ CF ₂ CF ₂	0
A599	Н	CH₃SO	Н	CF ₃ CF ₂ CF ₂	0
A600	н	CF ₃	Н	CF ₃ CF ₂ CF ₂	
A601	н	F₂CH	Н	CF ₃ CF ₂ CF ₂	

Comp. No.	R_2	R_3	R_4	R_5	р
A602	Н	HCC	н	CF ₃ CF ₂ CF ₂	0
A603	Н	CH₃CC	н	CF ₃ CF ₂ CF ₂	0
A604	Н	CH ₂ =CH	Н	CF ₃ CF ₂ CF ₂	0
A605	Н	CH ₂ =CHCH ₂	Н	CF ₃ CF ₂ CF ₂	0
A606	Н	CH ₃ SO ₂ N(CH ₃)	Н	CF ₃ CF ₂ CF ₂	0
A607	Н	$(CH_3)_2N$	Н	CF ₃ CF ₂ CF ₂	0
A608	Н	$(CH_3)_2NSO_2$	Н	CF ₃ CF ₂ CF ₂	0
A609	Н	CH ₃ SCH ₂	Н	CF ₃ CF ₂ CF ₂	0
A610	Н	CH ₃ SOCH ₂	Н	CF ₃ CF ₂ CF ₂	0
A611	Н	CH ₃ SO ₂ CH ₂	Н	CF ₃ CF ₂ CF ₂	0
A612	Н	CH₃	Н	CF₂CI	0
A613	Н	CH₃CH₂	Н	CF₂CI	0
A614	Н	cyclopropyl	Н	CF₂CI	0
A615	Н	(CH ₃) ₃ C	Н	CF ₂ Cl	0
A616	н	(CH ₃) ₂ CH	Н	CF₂CI	0
A617	н	$CH_3(CH_2)_2$	Н	CF₂CI	0
A618	Н	CH ₃ OCH ₂	Н	CF₂CI	0
A619	Н	$CH_3O(CH_2)_2$	Н	CF₂CI	0
A620	Н	Ph	Н	CF₂CI	0
A621	Н	PhO	Н	CF₂CI	0
A622	Н	PhS	Н	CF₂CI	0
A623	Н	PhSO	Н	CF₂CI	0
A624	Н	PhSO ₂	Н	CF₂Cl	0
A625	Н	CH₃S	Н	CF₂CI	0
A626	Н	CH₃SO	Н	CF₂CI	0
A627	Н	CF ₃	Н	CF ₂ Cl	0
A628	Н	F₂CH	Н	CF₂CI	0
A629	Н	HCC	Н	CF₂CI	0
A630	Н	CH₃CC	Н	CF₂CI	0
A631	Н	CH ₂ =CH	Н	CF₂CI	0
A632	Н	CH ₂ =CHCH ₂	Н	CF₂CI	0
A633	Н	CH ₃ SO ₂ N(CH ₃)	Н	CF₂CI	0
A634	Н	$(CH_3)_2N$	Н	CF ₂ CI	o

Comp. No.	R_2	R ₃	R_4	R_5	р
A635	Н	$(CH_3)_2NSO_2$	Н	CF ₂ CI	0
A636	Н	CH₃SCH₂	Н	CF ₂ CI	0
A637	Н	CH₃SOCH₂	Н	CF ₂ CI	0
A638	Н	CH ₃ SO ₂ CH ₂	Н	CF ₂ CI	0
A639	Н	CH ₃	Н	CHF ₂	0
A640	Н	CH ₃ CH ₂	Н	CHF ₂	0
A641	Н	cyclopropyl	Н	CHF ₂	0
A642	Н	$(CH_3)_3C$	Н	CHF ₂	0
A643	Н	(CH₃)₂CH	Н	CHF ₂	0
A644	Н	CH ₃ (CH ₂) ₂	Н	CHF ₂	0
A645	Н	CH ₃ OCH ₂	Н	CHF ₂	0
A646	Н	$CH_3O(CH_2)_2$	Н	CHF ₂	0
A647	Н	Ph	Н	CHF ₂	0
A648	Н	PhO	Н	CHF ₂	0
A649	Н	PhS	Н	CHF ₂	0
A650	Н	PhSO	Н	CHF ₂	0
A651	Н	PhSO ₂	Н	CHF ₂	0
A652	Н	CH₃S	Н	CHF ₂	0
A653	Н	CH₃SO	H	CHF ₂	0
A654	Н	CF ₃	Н	CHF ₂	0
A655	Н	F₂CH	Н	CHF ₂	0
A656	Н	HCC	Н	CHF ₂	0
A657	Н	CH₃CC	Н	CHF ₂	0
A658	Н	CH ₂ =CH	Н	CHF ₂	0
A659	Н	CH ₂ =CHCH ₂	Н	CHF ₂	0
A660	Н	CH ₃ SO ₂ N(CH ₃)	Н	CHF ₂	0
A661	H	(CH₃)₂N	Н	CHF ₂	0
A662	Н	$(CH_3)_2NSO_2$	Н	CHF ₂	0
A663	Н	CH₃SCH₂	Н	CHF ₂	0
A664	Н	CH₃SOCH₂	Н	CHF ₂	0
A665	Н	CH ₃ SO ₂ CH ₂	Н	CHF ₂	0
A666	Н	CH ₃	Н	CCI ₃	0
A667	Н	CH₃CH₂	Н	CCl ₃	0

Comp. No.	R ₂	R_3	R_4	R_5	р
A668	Н	cyclopropyl	Н	CCI ₃	0
A669	Н	$(CH_3)_3C$	Н	CCI ₃	0
A670	Н	(CH₃)₂CH	Н	CCI ₃	0
A671	Н	$CH_3(CH_2)_2$	Н	CCI ₃	0
A672	Н	CH ₃ OCH ₂	·H	CCI ₃	0
A673	Н	CH ₃ O(CH ₂) ₂	Н	CCI ₃	0
A674	Н	Ph	Н	CCI₃	0
A675	H	PhO	Н	CCl₃	0
A676	Н	PhS	Н	CCl ₃	0
A677	Н	PhSO	Н	CCI ₃	0
A678	Н	PhSO ₂	Н	CCI ₃	0
A679	Н	CH₃S	Н	CCI ₃	0
A680	Н	CH₃SO	Н	CCI ₃	0
A681	Н	CF₃	Н	CCI ₃	0
A682	Н	F ₂ CH	Н	CCI ₃	0
A683	Н	HCC	Н	CCI ₃	0
A684	Н	CH₃CC	Н	CCI ₃	0
A685	Н	CH₂=CH	Н	CCl ₃	0
A686	н	CH ₂ =CHCH ₂	Н	CCI ₃	0
A687	Н	CH ₃ SO ₂ N(CH ₃)	Н	CCI ₃	0
A688	Н	(CH₃)₂N	Н	CCl ₃	0
A689	Н	(CH ₃) ₂ NSO ₂	Н	CCI ₃	0
A690	Н	CH₃SCH₂	Н	CCl₃	0
A691	Н	CH₃SOCH₂	Н	CCI ₃	0
A692	Н	CH ₃ SO ₂ CH ₂	Н	CCI ₃	0
A693	Н	CH₃	CH₃	CF ₃	0
A694	Н	CH₃CH₂	CH₃	CF ₃	0
A695	Н	cyclopropyl	CH₃	CF₃	0
A696	Н	(CH₃)₃C	CH₃	CF₃	0
A697	Н	(CH ₃) ₂ CH	CH₃	CF₃	0
A698	Н	$CH_3(CH_2)_2$	CH₃	CF₃	0
A699	Н	CH₃OCH₂	CH₃	CF₃	0
A700	Н	CH ₃ O(CH ₂) ₂	CH₃	CF₃	0
			-	-	

Comp. No.	R_2	R₃	R_4	R_5	р
A701	Н	Ph	CH ₃	CF ₃	0
A702	Н	PhO	CH ₃	CF ₃	0
A703	н	PhS	CH ₃	CF ₃	0
A704	Н	PhSO	CH ₃	CF ₃	0
A705	H	PhSO ₂	CH ₃	CF ₃	0
A706	Н	CH₃S	CH ₃	CF ₃	0
A707	Н	CH₃SO	CH ₃	CF ₃	0
A708	Н	CF ₃	CH ₃	CF ₃	0
A709	Н	F ₂ CH	CH ₃	CF₃	0
A710	Н	HCC	CH₃	CF ₃	0
A711	Н	CH₃CC	CH₃	CF₃	0
A712	Н	CH₂=CH	CH₃	CF₃	0
A713	Н	CH ₂ =CHCH ₂	CH ₃	CF ₃	0
A714	Н	CH ₃ SO ₂ N(CH ₃)	CH₃	CF ₃	0
A715	Н	(CH₃)₂N	CH₃	CF ₃	0
A716	Н	$(CH_3)_2NSO_2$	CH ₃	CF₃	0
A717	Н	CH₃SCH₂	CH₃	CF ₃	0
A718	Н	CH₃SOCH₂	CH ₃	CF₃	0
A719	Н	CH ₃ SO ₂ CH ₂	CH₃	CF ₃	0
A720	Н	CH ₃	CH₃	CF ₃ CF ₂	0
A721	Н	CH₃CH₂	CH₃	CF ₃ CF ₂	0
A722	Н	cyclopropyl	CH₃	CF ₃ CF ₂	0
A723	Н	(CH₃)₃C	CH₃	CF ₃ CF ₂	0
A724	Н	(CH ₃) ₂ CH	CH₃	CF ₃ CF ₂	0
A725	Н	CH ₃ (CH ₂) ₂	CH₃	CF ₃ CF ₂	0
A726	Н	CH₃OCH₂	CH₃	CF ₃ CF ₂	0
A727	Н	CH ₃ O(CH ₂) ₂	CH₃	CF ₃ CF ₂	0
A728	Н	Ph	CH₃	CF ₃ CF ₂	0
A729	Н	PhO	CH₃	CF ₃ CF ₂	0
A730	Н	PhS	CH₃	CF ₃ CF ₂	0
A731	н	PhSO	CH₃	CF ₃ CF ₂	0
A732	Н	PhSO₂	CH₃	CF ₃ CF ₂	0
A733	н	CH₃S	СН₃	CF ₃ CF ₂	0

Comp. No.	R_2	R_3	R ₄	R_{5}	р
A734	Н	CH₃SO	CH ₃	CF ₃ CF ₂	0
A735	Н	CF ₃	CH ₃	CF ₃ CF ₂	0
A736	Н	F ₂ CH	CH₃	CF ₃ CF ₂	0
A737	Н	HCC	CH₃	CF ₃ CF ₂	0
A738	н	CH₃CC	CH₃	CF ₃ CF ₂	0
A739	н	CH ₂ =CH	CH₃	CF ₃ CF ₂	0
A740	Н	CH ₂ =CHCH ₂	CH₃	CF ₃ CF ₂	0
A741	н	CH ₃ SO ₂ N(CH ₃)	CH₃	CF ₃ CF ₂	0
A742	Н	(CH ₃) ₂ N	CH₃	CF ₃ CF ₂	0
A743	н	(CH ₃) ₂ NSO ₂	CH₃	CF ₃ CF ₂	0
A744	н	CH₃SCH₂	CH₃	CF ₃ CF ₂	0
A745	Н	CH₃SOCH₂	СН₃	CF ₃ CF ₂	0
A746	Н	CH ₃ SO ₂ CH ₂	CH₃	CF ₃ CF ₂	0
A747	Н	CH₃	СН₃	CF ₃ CF ₂ CF ₂	0
A748	Н	CH₃CH₂	CH₃	CF ₃ CF ₂ CF ₂	0
A749	Н	cyclopropyl	СН₃	CF ₃ CF ₂ CF ₂	0
A750	Н	(CH₃)₃C	CH₃	CF ₃ CF ₂ CF ₂	0
A751	н	(CH₃)₂CH	CH₃	CF ₃ CF ₂ CF ₂	0
A752	Н	$CH_3(CH_2)_2$	CH ₃	CF ₃ CF ₂ CF ₂	0
A753	Н	CH₃OCH₂	CH ₃	CF ₃ CF ₂ CF ₂	0
A754	Н	CH ₃ O(CH ₂) ₂	CH₃	CF ₃ CF ₂ CF ₂	0
A755	Н	Ph	CH₃	CF ₃ CF ₂ CF ₂	0
A756	н	PhO	CH ₃	CF ₃ CF ₂ CF ₂	0
A757	Н	PhS	CH ₃	CF ₃ CF ₂ CF ₂	0
A758	Н	PhSO	CH₃	CF ₃ CF ₂ CF ₂	0
A759	Н	PhSO ₂	CH₃	CF ₃ CF ₂ CF ₂	0
A760	Н	CH₃S	СН₃	CF ₃ CF ₂ CF ₂	0
A761	Н	CH₃SO	CH₃	CF ₃ CF ₂ CF ₂	0
A762	Н	CF ₃	СН₃	CF ₃ CF ₂ CF ₂	0
A763	Н	F ₂ CH	CH ₃	CF ₃ CF ₂ CF ₂	0
A764	Н	HCC	CH₃	CF ₃ CF ₂ CF ₂	0
A765	н	CH₃CC	CH₃	CF ₃ CF ₂ CF ₂	0
A766	Н	CH₂=CH	CH ₃	CF ₃ CF ₂ CF ₂	0

Comp. No.	R ₂	R ₃	R_4	R_5	р
A767	Н	CH ₂ =CHCH ₂	СН₃	CF ₃ CF ₂ CF ₂	0
A768	Н	CH ₃ SO ₂ N(CH ₃)	CH₃	CF ₃ CF ₂ CF ₂	0
A769	н	$(CH_3)_2N$	CH₃	CF ₃ CF ₂ CF ₂	0
A770	Н	$(CH_3)_2NSO_2$	CH₃	CF ₃ CF ₂ CF ₂	0
A771	Н	CH₃SCH₂	CH₃	CF ₃ CF ₂ CF ₂	0
A772	Н	CH₃SOCH₂	CH₃	CF ₃ CF ₂ CF ₂	0
A773	Н	CH ₃ SO ₂ CH ₂	CH₃	CF ₃ CF ₂ CF ₂	0
A774	Н	CH ₃	CH ₃	CF ₂ Cl	0
A775	Н	CH₃CH₂	CH ₃	CF ₂ CI	0
A776	Н	cyclopropyl	CH₃	CF₂CI	0
A777	Н	(CH ₃) ₃ C	СН3	CF₂CI	0
A778	Н	(CH₃)₂CH	CH₃	CF ₂ Cl	0
A779	Н	$CH_3(CH_2)_2$	CH ₃	CF ₂ CI	0
A780	Н	CH₃OCH₂	CH ₃	CF ₂ Cl	0
A781	Н	$CH_3O(CH_2)_2$	CH ₃	CF ₂ Cl	0
A782	. H	Ph	CH ₃	CF ₂ CI	0
A783	Н	PhO	CH ₃	CF ₂ Cl	0
A784	Н	PhS	CH ₃	CF ₂ CI	0
A785	Н	PhSO	CH ₃	CF₂CI	0 ,
A786	Н	PhSO ₂	CH ₃	CF₂CI	0
A787	Н	CH₃S	CH ₃	CF ₂ CI	0
A788	Н	CH₃SO	CH ₃	CF ₂ CI	0
A789	Н	CF ₃	CH ₃	CF₂Cl	0
A790	Н	F₂CH	CH₃	CF₂CI	0
A791	Н	HCC	CH ₃	CF ₂ CI	0
A792	Н	CH₃CC	CH₃	CF₂CI	0
A793	Н	CH ₂ =CH	CH₃	CF₂CI	0
A794	Н	CH ₂ =CHCH ₂	CH₃	CF ₂ CI	0
A795	Н	CH ₃ SO ₂ N(CH ₃)	CH₃	CF₂CI	0
A796	Н	(CH ₃) ₂ N	CH₃	CF₂CI	0
A797	Н	$(CH_3)_2NSO_2$	CH₃	CF ₂ Cl	0
A798	Н	CH₃SCH₂	CH₃	CF ₂ CI	0
A799	Н	CH₃SOCH₂	CH₃	CF₂CI	0

Comp. No.	R_2	R_3	R_4	R_5	p
A800	Н	CH₃SO₂CH₂	CH ₃	CF ₂ CI	0
A801	Н	CH₃	CH ₃	CHF ₂	0
A802	Н	CH₃CH₂	CH ₃	CHF ₂	0
A803	Н	cyclopropyl	CH ₃	CHF ₂	0
A804	Н	(CH ₃) ₃ C	CH ₃	CHF ₂	0
A805	Н	(CH ₃) ₂ CH	CH ₃	CHF ₂	0
A806	Н	$CH_3(CH_2)_2$	CH ₃	CHF ₂	0
A807	Н	CH ₃ OCH ₂	CH₃	CHF ₂	0
A808	Н	$CH_3O(CH_2)_2$	CH₃	CHF ₂	0
A809	Н	Ph	CH₃	CHF ₂	0
A810	Н	PhO	CH₃	CHF ₂	0
A811	Н	PhS	CH₃	CHF ₂	0
A812	Н	PhSO	CH₃	CHF ₂	0
A813	Н	PhSO ₂	CH₃	CHF ₂	0
A814	Н	CH₃S	CH₃	CHF ₂	0
A815	Н	CH₃SO	CH ₃	CHF ₂	0
A816	Н	CF ₃	CH₃	CHF ₂	0
A817	Н	F₂CH	CH₃	CHF ₂	0
A818	Н	HCC	CH₃	CHF ₂	0
A819	Н	CH₃CC	CH₃	CHF ₂	0
A820	Н	CH₂=CH	CH₃	CHF ₂	0
A821	н	CH ₂ =CHCH ₂	CH₃	CHF ₂	0
A822	Н	CH ₃ SO ₂ N(CH ₃)	CH₃	CHF ₂	0
A823	Н	$(CH_3)_2N$	CH₃	CHF ₂	0
A824	Н	$(CH_3)_2NSO_2$	CH₃	CHF ₂	0
A825	Н	CH₃SCH₂	CH₃	CHF ₂	0
A826	Н	CH₃SOCH₂	CH₃	CHF ₂	0
A827	Н	CH ₃ SO ₂ CH ₂	CH ₃	CHF ₂	0
A828	н	CH ₃	CH ₃	CCI ₃	0
A829	н	CH₃CH₂	CH₃	CCI ₃	0
A830	Н	cyclopropyl	CH ₃	CCI ₃	0
A831	Н	(CH ₃) ₃ C	CH₃	CCI ₃	0
A832	Н	(CH ₃) ₂ CH	CH₃	CCI ₃	0

Comp. No.	R_2	R_3	R_4	R ₅	р
A833	Н	$CH_3(CH_2)_2$	CH₃	CCI ₃	0
A834	Н	CH ₃ OCH ₂	CH ₃	CCI ₃	0
A835	Н	CH ₃ O(CH ₂) ₂	CH₃	CCI ₃	0
A836	Н	Ph	CH₃	CCI ₃	0
A837	Н	PhO	CH₃	CCI ₃	0
A838	Н	PhS	CH ₃	CCl ₃	0
A839	Н	PhSO	CH ₃	CCI ₃	0
A840	Н	PhSO ₂	CH₃	CCl ₃	0
A841	Н	CH₃S	CH ₃	CCl ₃	0
A842	Н	CH₃SO	CH₃	CCI ₃	0
A843	н	CF ₃	CH ₃	CCI ₃	0
A844	Н	F ₂ CH	CH ₃	CCI ₃	0
A845	Н	HCC	CH ₃	CCI ₃	0
A846	H	CH₃CC	CH ₃	CCI ₃	0
A847	Н	CH ₂ =CH	CH ₃	CCI ₃	0
A848	Н	CH ₂ =CHCH ₂	CH ₃	CCI ₃	0
A849	Н	CH ₃ SO ₂ N(CH ₃)	CH ₃	CCI ₃	0
A850	Н	(CH₃)₂N	CH ₃	CCl ₃	0
A851	Н	$(CH_3)_2NSO_2$	CH ₃	CCI ₃	0
A852	Н	CH₃SCH₂	CH ₃	CCl ₃	0
A853	Н	CH₃SOCH₂	CH ₃	CCl ₃	0
A854	Н	CH₃SO₂CH₂	CH ₃	CCl ₃	0
A855	Н	CH₃	Ph	CF ₃	0
A856	Н	CH ₃ CH ₂	Ph	CF ₃	0
A857	Н	(CH ₃) ₂ CH	Ph	CF ₃	0
A858	Н	(CH ₃) ₂ CH	Ph	CF ₃	0
A859	Н	cyclopropyl	Ph	CF ₃	0
A860	Н	$CH_3(CH_2)_2$	Ph	CF ₃	0
A861	Н	CH ₃ OCH ₂	Ph	CF ₃	0
A862	Н	CH ₃ O(CH ₂) ₂	Ph	CF ₃	0
A863	Н	Ph	Ph	CF ₃	0
A864	н	PhO	Ph	CF ₃	0
A865	Н	PhS	Ph	CF ₃	0

Comp. No.	R_2	R ₃	R_4	R_5	р
A866	Н	PhSO	Ph	CF₃	0
A867	Н	PhSO ₂	Ph	CF ₃	0
A868	Н	CH₃S	Ph	CF₃	0
A869	Н	CH₃SO	Ph	CF ₃	0
A870	- H	CF₃	Ph	CF ₃	0
A871	Н	F₂CH	Ph	CF ₃	. 0
A872	Н	HCC	Ph	CF ₃	0
A873	Н	CH₃CC	Ph	CF₃	0
A874	Н	CH₂=CH	Ph	CF ₃	0
A875	Н	CH ₂ =CHCH ₂	Ph	CF₃	0
A876	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CF ₃	0
A877	Н	$(CH_3)_2N$	Ph	CF₃	0
A878	Н	$(CH_3)_2NSO_2$	Ph	CF₃	0
A879	Н	CH ₃ SCH ₂	Ph	CF₃	0
A880	Н	CH₃SOCH₂	Ph	CF₃	0
A881	Н	CH ₃ SO ₂ CH ₂	Ph	CF₃	0
A882	Н	CH ₃	Ph	CF ₃ CF ₂	0
A883	Н	CH₃CH₂	Ph	CF ₃ CF ₂	0
A884	Н	cyclopropyl	Ph	CF ₃ CF ₂	0
A885	Н	$(CH_3)_3C$	Ph	CF ₃ CF ₂	0
A886	Н	(CH ₃) ₂ CH	Ph	CF ₃ CF ₂	0
A887	Н	$CH_3(CH_2)_2$	Ph	CF ₃ CF ₂	0
A888	Н	CH₃OCH₂	Ph	CF ₃ CF ₂	0
A889	Н	$CH_3O(CH_2)_2$	Ph	CF ₃ CF ₂	0
A890	Н	Ph	Ph	CF ₃ CF ₂	0
A891	Н	PhO	Ph	CF ₃ CF ₂	0
A892	Н	PhS	Ph	CF ₃ CF ₂	0
A893	Н	PhSO	Ph	CF ₃ CF ₂	0
A894	Н	PhSO ₂	Ph	CF ₃ CF ₂	0
A895	Н	CH₃S	Ph	CF ₃ CF ₂	0
A896	Н	CH₃SO	Ph	CF ₃ CF ₂	0
A897	н	CF ₃	Ph	CF ₃ CF ₂	0
A898	Н	F₂CH	Ph	CF ₃ CF ₂	0

Comp. No.	R_2	R_3	R_4	R₅	р
A899	Н	HCC	Ph	CF₃CF₂	0
A900	Н	CH₃CC	Ph	CF ₃ CF ₂	0
A901	Н	CH ₂ =CH	Ph	CF ₃ CF ₂	0
A902	Н	CH ₂ =CHCH ₂	Ph	CF ₃ CF ₂	0
A903	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CF ₃ CF ₂	0
A904	H	(CH ₃) ₂ N	Ph	CF ₃ CF ₂	0
A905	Н	$(CH_3)_2NSO_2$	Ph	CF ₃ CF ₂	0
A906	Н	CH₃SCH₂	Ph	CF ₃ CF ₂	0
A907	Н	CH ₃ SOCH ₂	Ph	CF ₃ CF ₂	0
A908	Н	CH ₃ SO ₂ CH ₂	Ph	CF ₃ CF ₂	0
A909	Н	CH₃	Ph	CF ₃ CF ₂ CF ₂	0
A910	Н	CH₃CH₂	Ph	CF ₃ CF ₂ CF ₂	0
A911	Н	cyclopropyl	Ph	CF ₃ CF ₂ CF ₂	0
A912	Н	$(CH_3)_3C$	Ph	CF ₃ CF ₂ CF ₂	0
A913	Н	(CH ₃) ₂ CH	Ph	CF ₃ CF ₂ CF ₂	0
A914	Н	$CH_3(CH_2)_2$	Ph	CF ₃ CF ₂ CF ₂	0
A915	Н	CH₃OCH₂	Ph	CF ₃ CF ₂ CF ₂	0
A916	Н	$CH_3O(CH_2)_2$	Ph	CF ₃ CF ₂ CF ₂	0
A917	Н	Ph	Ph	CF ₃ CF ₂ CF ₂	0
A918	Н	PhO	Ph	CF ₃ CF ₂ CF ₂	o
A919	Н	PhS	Ph	CF ₃ CF ₂ CF ₂	0
A920	Н	PhSO	Ph	CF ₃ CF ₂ CF ₂	0
A921	Н	PhSO ₂	Ph	CF ₃ CF ₂ CF ₂	0
A922	Н	CH₃S	Ph	CF ₃ CF ₂ CF ₂	0
A923	Н	CH₃SO	Ph	CF ₃ CF ₂ CF ₂	0
A924	Н	CF ₃	Ph	CF ₃ CF ₂ CF ₂	0
A925	Н	F ₂ CH	Ph	CF ₃ CF ₂ CF ₂	0
A926	Н	HCC	Ph	CF ₃ CF ₂ CF ₂	0
A927	н	CH₃CC	Ph	CF ₃ CF ₂ CF ₂	0
A928	Н	CH ₂ =CH	Ph	CF ₃ CF ₂ CF ₂	0
A929	Н	CH ₂ =CHCH ₂	Ph	CF ₃ CF ₂ CF ₂	
A930	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CF ₃ CF ₂ CF ₂	
A931	Н	(CH₃)₂N	Ph	CF ₃ CF ₂ CF ₂	0

(Comp. No.	R_2	R_3	R_4	R ₅	р
	A932	Н	$(CH_3)_2NSO_2$	Ph	CF ₃ CF ₂ CF ₂	0
	A933	Н	CH₃SCH₂	Ph	CF ₃ CF ₂ CF ₂	0
	A934	Н	CH ₃ SOCH ₂	Ph	CF ₃ CF ₂ CF ₂	0
	A935	Н	CH ₃ SO ₂ CH ₂	Ph	CF ₃ CF ₂ CF ₂	0
	A936	Н	CH₃	Ph	CF ₂ CI	0
	A937	Н	CH₃CH₂	Ph	CF ₂ CI	0
	A938	Н	cyclopropyl	Ph	CF ₂ CI	0
	A939	Н	(CH ₃) ₃ C	Ph	CF ₂ CI	0
	A940	Н	(CH₃)₂CH	Ph	CF ₂ CI	0
	A941	Н	CH ₃ (CH ₂) ₂	Ph	CF ₂ Cl	0
	A942	Н	CH₃OCH₂	Ph	CF₂CI	0
	A943	Н	CH ₃ O(CH ₂) ₂	Ph	CF₂CI	0
	A944	Н	Ph	Ph	CF ₂ CI	0
	A945	Н	PhO	Ph	CF₂CI	0
	A946	Н	PhS	Ph	CF ₂ CI	0
	A947	Н	PhSO	Ph	CF ₂ CI	0
	A948	Н	PhSO ₂	Ph	CF ₂ CI	0
	A949	Н	CH₃S	Ph		0
	A950	Н	CH₃SO	Ph	CF₂CI	0
	A951	Н	CF ₃	Ph	CF ₂ CI	0
	A952	Н	F ₂ CH	Ph	CF₂CI	0
	A953	Н	HCC	Ph		0
	A954	Н	CH₃CC	Ph	CF₂CI	0
	A955	Н	CH ₂ =CH	Ph	CF ₂ CI	0
	A956	Н	CH ₂ =CHCH ₂	Ph	CF₂CI	0
	A957	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CF ₂ Cl	0
	A958	Н	(CH ₃)₂N	Ph	CF ₂ CI	0
	A959	Н	(CH ₃) ₂ NSO ₂	Ph	CF ₂ CI	0
	A960	Н	CH₃SCH₂	Ph	CF ₂ CI	0
	A961	Н	CH ₃ SOCH ₂	Ph	2/10/10	0
	A962	Н	CH ₃ SO ₂ CH ₂	Ph	CF ₂ Cl	0
	A963	Н	CH ₃	Ph	4	0
	A964	Н	CH ₃ CH ₂	Ph	CHF ₂)

Comp. No.	R_2	R ₃	R_4	R ₅	р
A965	н	(CH₃)₃C	Ph	CHF ₂	0
A966	Н	(CH ₃) ₂ CH	Ph	CHF ₂	0
A967	Н	cyclopropyl	Ph	CHF ₂	0
A968	Н	$CH_3(CH_2)_2$	Ph	CHF ₂	0
A969	Н	CH ₃ OCH ₂	Ph	CHF ₂	0
A970	Н	CH ₃ O(CH ₂) ₂	Ph	CHF ₂	0
A971	Н	Ph	Ph	CHF ₂	0
A972	Н	PhO	Ph	CHF ₂	0
A973	н	PhS	Ph	CHF ₂	0
A974	Н	PhSO	Ph	CHF ₂	0
A975	Н	PhSO ₂	Ph	CHF ₂	0
A976	Н	CH₃S	Ph	CHF ₂	0
A977	Н	CH₃SO	Ph	CHF ₂	0
A978	Н	CF₃	Ph	CHF ₂	0
A979	Н	F ₂ CH	Ph	CHF ₂	0
A980	Н	HCC	Ph	CHF ₂	0
A981	Н	CH₃CC	Ph	CHF ₂	0
A982	Н	CH ₂ =CH	Ph	CHF ₂	0
A983	Н	CH ₂ =CHCH ₂	Ph	CHF ₂	0
A984	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CHF ₂	0
A985	Н	$(CH_3)_2N$	Ph	CHF ₂	0
A986	Н	$(CH_3)_2NSO_2$	Ph	CHF ₂	0
A987	Н	CH₃SCH₂	Ph	CHF ₂	0
A988	Н	CH₃SOCH₂	Ph	CHF ₂	0
A989	Н	CH₃SO₂CH₂	Ph	CHF ₂	0
A990	Н	CH ₃	Ph	CCI ₃	0
A991	Н	CH₃CH₂	Ph	CCl ₃	0
A992	Н	(CH₃)₃C	Ph	CCI ₃	0
A993	Н	(CH₃)₂CH	Ph	CCI ₃	0
A994	Н	cyclopropyl	Ph	CCI ₃	0
A995	Н	$CH_3(CH_2)_2$	Ph	CCI ₃	0
A996	Н	CH₃OCH₂	Ph	CCI ₃	0
A997	Н	$CH_3O(CH_2)_2$	Ph	CCI ₃	0

Comp. No.	R_2	R ₃	R_4	R_5	р
A998	Н	Ph	Ph	CCI ₃	0
A999	Н	PhO	Ph	CCI ₃	0
A1000	Н	PhS	Ph	CCI ₃	0
A1001	Н	PhSO	Ph	CCI ₃	0
A1002	Н	PhSO ₂	Ph	CCI ₃	0
A1003	Н	CH₃S	Ph	CCI ₃	0
A1004	Н	CH₃SO	Ph	CCI ₃	0
A1005	Н	CF ₃	Ph	CCl ₃	0
A1006	Н	F₂CH	Ph	CCI ₃	0
A1007	Н	HCC	Ph	CCI ₃	0
A1008	Н	CH₃CC	Ph	CCI ₃	0
A1009	Н	CH ₂ =CH	Ph	CCI ₃	0
A1010	Н	CH ₂ =CHCH ₂	Ph	CCI ₃	0
A1011	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CCI ₃	0
A1012	Н	$(CH_3)_2N$	Ph	CCI ₃	0
A1013	Н	$(CH_3)_2NSO_2$	Ph	CCI ₃	0
A1014	Н	CH₃SCH₂	Ph	CCI ₃	0
A1015	Н	CH ₃ SOCH ₂	Ph	CCI ₃	0
A1016	Н	CH ₃ SO ₂ CH ₂	Ph	CCI ₃	0
A1017	F	Н	Н	CF ₃	0
A1018	CI	Н	Н	CF₃	0
A1019	Br	Н	Н	CF ₃	0
A1020	NC	н	Н	CF ₃	0
A1021	CH₃SO₂O	Н	Н	CF ₃	0
A1022	CH₃O	Н	Н	CF₃	0
A1023	CH₃CH₂O	Н	Н	CF ₃	0
A1024	CH ₂ CH=CH ₂ O	Н	Н	CF ₃	0
A1025	HCCCH₂O	Н	Н	CF ₃	0
A1026	PhCH₂S	Н	Н	. CF ₃	0
A1027	PhCH ₂ SO ₂	Н	Н	CF ₃	0
A1028	CICH ₂ CH ₂	Н	Н	CF ₃	0
A1029	BrCH ₂	Н	Н	CF ₃	0
A1030	FCH ₂	Н	Н	CF ₃	0

Comp. No.	R_2	R₃	R_4	R₅	р
A1031	CHF ₂ CH ₂	Н	Н	CF ₃	0
A1032	CF ₃ CH ₂	Н	Н	CF ₃	0
A1033	[1,3]-imidazol-1-ylmethyl	Н	Н	CF ₃	0
A1034	CHCl ₂ CH ₂	Н	Н	CF ₃	0
A1035	CICH=CH	Н	Н	CF ₃	0
A1036	Cl ₂ C=CH	Н	Н	CF₃	0
A1037	CF₃CH=CH	н	Н	CF ₃	0
A1038	CICC	н	Н	CF ₃	0
A1039	PhCH ₂	Н	Н	CF ₃	0
A1040	CH ₃ CH ₂	CH₃	H	CF ₃	0
A1041	CH ₃	ОН	Н	CF ₃	0
A1042	CH ₃	F	Н	CF ₃	0
A1043	CH₃	CI	н	CF ₃	0
A1044	F	CH₃	Н	CF ₃	0
A1045	CI	CH₃	н	CF ₃	0
A1046	Н	F	Н	CF ₃	0
A1047	Н	CI	Н	CF ₃	0
A1048	Н	Br	н	CF ₃	0
A1049	Н	ОН	Н	CF ₃	0
A1050	Н	OCH₃	Н	CF ₃	0
A1051	Н	OCHF ₂	Н	CF ₃	0
A1052	Н	OSO₂CH₃	Н	CF ₃	0
A1053	Н	OSO ₂ CF ₃	Н	CF ₃	0
A1054	Н	CICH ₂	Н	CF ₃	0
A1055	Н	BrCH ₂	H	CF ₃	0
A1056	Н	FCH ₂	Н	CF ₃	0
A1057	Н	CHF ₂ CH ₂	Н	CF ₃	0
A1058	Н	CF₃CH₂	Н	CF ₃	0
A1059	Н	triazolylmethyl	Н	CF ₃	0
A1060	Н	CHCl ₂ CH ₂	H	CF ₃	0
A1061	Н	CICH=CH	Н	CF ₃	0
A1062	Н	Cl ₂ C=CH	Н	CF ₃	0
A1063	Н	CF ₃ CH=CH	Н	CF ₃	0

Comp. No.	R_2	R ₃	R_4	R_5	р
A1064	Н	CICC	Н	CF ₃	0
A1065	Н	CH₃C(O)	Н	CF ₃	0
A1066	Н	Ph	Н	CF ₃	0
A1067	Н	SO₂CH ₃	Н	CF ₃	0
A1068	Н	SO ₂ CF ₃	Н	CF ₃	0
A1069	Н	NC	Н	CF ₃	0
A1070	Н	NO_2	Н	CF ₃	0
A1071	CH₃	Н	F	CF ₃	0
A1072	CH ₃	Н	CI	CF ₃	0
A1073	CH ₃	Н	Br	CF ₃	0
A1074	CH ₃	Н	NC	CF ₃	0
A1075	CH₃	Н	CH₃O	CF ₃	0
A1076	CH ₃	Н	CH₃S	CF ₃	0
A1077	CH ₃	н	CH₃SO	CF ₃	0
A1078	CH₃	Н	CH₃SO₂	CF₃	0
A1079	CH ₃ CH ₂ OCH ₂	Н	Н	CF ₃	0
A1080	PhOCH ₂	Н	Н	CF₃	0
A1081	NOCH ²	Н	Н	CF ₃	0
A1082	(CH ₃) ₂ CH ₂ OCH ₂	Н	Н	CF ₃	0
A1083	BrCH ₂ CH ₂	Н	н	CF ₃	0
A1084	FCH ₂ CH ₂	Н	Н	CF ₃	0
A1085	N SCH ₂	Н	Н	CF₃	0
A1086	N SOCH ₂	Н	Н	CF ₃	0
A1087	N SO ₂ CH ₂	Н	Н	CF ₃	0
A1088	O N SCH ₂	Н	Н	CF₃	0

Comp. No.	R_{2}	R ₃	$R_{\scriptscriptstyle{4}}$	R ₅	р
A1089	O N SOCH2	н	Н	CF₃	0
	N				
A1090	_ONSO ₂ CH ₂	Н	Н	CF ₃	0
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	••	•••	O1 3	U
	√ 0				
A1091	cyclopropyl-CH ₂	Н	Н	CF ₃	0
A1092	2,2-dichlorocycloprop-1-	Н	Н	CF ₃	0
	yl				
A1093	CH₃OC(O)CH=CH	Н	Н	CF ₃	0
A1094	CH ₃ CH ₂ OC(O)CH=CH	Н	Н	CF ₃	0
A1095	CICH ₂ CH=CH	Н	Н	CF ₃	0
A1096	CH=C=CH	Н	Н	CF ₃	0
A1097	(CH3)2NCH2	Н	н	CF ₃	0
A1098	HOCH₂	Н	Н	CF ₃	0
A1099	CH ₃ C(O)OCH ₂	Н	Н	CF₃	0
A1100	PhC(O)OCH ₂	Н	Н	CF ₃	0
A1101	PhCH ₂ CH ₂	Н	Н	CF ₃	0
A1102	CH ₃ OC(O)CH ₂	Н	H	CF ₃	0
A1103	NCCH ₂	Н	Н	CF ₃	0
A1104	CH ₃ (CH ₂) ₇ SCH ₂	Н	Н	CF₃	0
A1105	CH ₃ (CH ₂) ₇ SOCH ₂	Н	Н	CF ₃	0
A1106	CH ₃ (CH ₂) ₇ SO ₂ CH ₂	Н	Н	CF ₃	0
A1107	()	Н	Н	CF ₃	0
A1108	CICH ₂ CC	Н	Н	CF ₃	0
A1109	CHF2CH2CH2	Н	Н	CF ₃	0
A1110	CHCl ₂ CH ₂ CH ₂	Н	Н	CF ₃	0
A1111	CF₃SO₂O	Н	Н	CF ₃	0
A1112	N (1)	н	Н	CF ₃	0
A1113	()	Н	н	CF₃	0
	N. J				

Comp. No	R_2	R_3	R_4	R_5	р
A1114	()	Н	Н	CF ₃	0
	N.				
A1115	CH ₂	Н	Н	CF ₃	0
A1116	N CH ₂	Н	Н	CF ₃	0
A1117	N CH ₂	Н	Н	CF ₃	0
A1118	CH ₃ ON=CHCH ₂	Н	н	CF₃	0
A1119	O=CHCH ₂	Н	н	CF₃	0
A1120	CH₃CH₂OCH₂	Н	Н	CF ₂ CI	0
A1121	PhOCH₂	Н	н	CF₂CI	0
A1122	OCH ₂	Н	Н	CF ₂ CI	0
A1123	(CH ₃) ₂ CH ₂ OCH ₂	Н	н	CF₂CI	0
A1124	BrCH₂	Н	Н	CF₂CI	0
A1125	FCH₂	н	Н	CF ₂ CI	0
A1126	N SCH ₂	Н	Н	CF ₂ CI	0
A1127	N SOCH ₂	Н	Н	CF ₂ Cl	0
A1128	SO ₂ CH ₂	Н	н	CF₂CI	0
A1129	O N SCH ₂	н	Н	CF₂CI	0
A1130	O N SOCH ₂	Н	H	CF₂Cl	0
A1131	O N SO ₂ CH ₂	Н .	Н	CF₂Cl	0
A1132	cyclopropyl-CH ₂	Н	Н	CF ₂ CI	0
A1133	2,2-dichlorocycloprop-1-	Н	н	CF ₂ Cl	0
	yl			_	

Comp. No.	R_2	R ₃	R_4	R ₅	р
A1134	CH₃OC(O)CH=CH	Н	Н	CF₂CI	0
A1135	CH ₃ CH ₂ OC(O)CH=CH	Н	Н	CF ₂ CI	0
A1136	CICH₂CH=CH	Н	Н	CF ₂ CI	0
A1137	CH=C=CH	Н	Н	CF ₂ CI	0
A1138	$(CH_3)_2NCH_2$	Н	Н	CF ₂ CI	0
A1139	HOCH ₂	, н	. Н	CF ₂ CI	0
A1140	CH ₃ C(O)OCH ₂	Н	Н	CF ₂ CI	0
A1141	PhC(O)OCH ₂	Н	Н	CF ₂ CI	0
A1142	PhCH₂	Н	Н	CF ₂ Cl	0
A1143	CH ₃ OC(O)CH ₂	Н	Н	CF ₂ CI	0
A1144	NCCH ₂	Н	Н	CF ₂ Cl	0
A1145	CH ₃ (CH ₂) ₇ SCH ₂	Н	Н	CF ₂ Cl	0
A1146	CH ₃ (CH ₂) ₇ SOCH ₂	н	Н	CF ₂ CI	0
A1147	$CH_3(CH_2)_7SO_2CH_2$	Н	Н	CF₂CI	0
A1148	()	Н	Н	CF₂CI	0
A1149	CICH ₂ CC	Н	Н	CF ₂ Cl	0
A1150	Br	Н	Н	CF ₂ CI	0
A1151	CI	Н	Н	CF ₂ CI	0
A1152	CF ₃ SO ₂ O	н	Н	CF₂CI	0
A1153	()	Ħ	Н	CF ₂ Cl	0
A1154	(°)	н	Н	CF ₂ CI	0
	N				
A1155	()	Н	Н	CF₂CI	0
	N			0. 20.	Ū
A1156	N CH ₂	Н	Н	CF ₂ CI	0
711100		• • • • • • • • • • • • • • • • • • • •	П	CF ₂ CI	0
A1157	N CH ₂	Н	Н	CF ₂ Cl	0
A1158	CH ₂	Н	Н	CF ₂ CI	0
A1159	CH₃ON=CHCH₂	ы	IJ	CE O	•
AIIU	OF 13ON=OHOH2	Н	Н	CF ₂ Cl	0

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Comp. N	o. R ₂	R ₃	R_4	R ₅	р
A1160	O=CHCH ₂	Н	Н	CF ₂ Cl	0
A1161	CH ₃ CH ₂ OCH ₂	Н	Н	CF₂H	0
A1162	PhOCH ₂	Н	Н	CF₂H	0
A1163	OCH ₂	Н	Н	CF₂H	0
A1164	(CH ₃) ₂ CH ₂ OCH ₂	Н	Н	CF₂H	0
A1165	BrCH₂	Н	Н	CF₂H	0
A1166	FCH ₂	н	н	CF ₂ H	0
A1167	SCH ₂	Н	Н	CF₂H	0
A1168	N SOCH ₂	Н	Н	CF₂H	0
A1169	N SO ₂ CH ₂	Н	Н	CF₂H	0
A1170	O N SCH ₂	Н	Н	CF₂H	0
A1171	O N SOCH ₂	н	Н	CF₂H	0
A1172	N SO ₂ CH ₂	Н	Н	CF₂H	0
A1173	cyclopropyl-CH ₂	Н	н	CF₂H	0
A1174	2,2-dichlorocycloprop-1-	Н	Н	CF₂H	0
	yl			-	
A1175	CH₃OC(O)CH=CH	Н	Н	CF₂H	0
A1176	CH₃CH₂OC(O)CH=CH	н	Н	- CF₂H	0
A1177		Н	Н	CF₂H	0
A1178		Н	Н	CF₂H	0
A1179	(CH ₃) ₂ NCH ₂	н	н	CF₂H	0
A1180	HOCH₂	Н	Н	CF₂H	0
A1181	CH ₃ C(O)OCH ₂	Н	Н	CF₂H	0
A1182		Н	Н	CF₂H	0
				2	-

Comp. No.	R_2	R ₃	R_4	R_5	р
A1183	PhCH ₂	Н	Н	CF₂H	0
A1184	CH ₃ OC(O)CH ₂	Н	Н	CF₂H	0
A1185	NCCH₂	Н	Н	CF₂H	0
A1186	CH ₃ (CH ₂) ₇ SCH ₂	Н	Н	CF₂H	0
A1187	CH ₃ (CH ₂) ₇ SOCH ₂	Н	Н	CF₂H	0
A1188	CH ₃ (CH ₂) ₇ SO ₂ CH ₂	Н	н	CF₂H	0
A1189		Н	Н	CF₂H	0
A1190	CICH ₂ CC	Н	Н	CF ₂ H	0
A1191	Br	Н	Н	CF₂H	0
A1192	CI	Н	Н	CF₂H	0
A1193	CF₃SO₂O	Н	Н	CF₂H	0
A1194	N ()	Н	Н	CF₂H	0
A1195	()	Н	Н	CF₂H	0
A1196	()	н	Н	CF₂H	0
				J. 2	•
A1197	N CH ₂	Н	H	CF ₂ H	0
		•••	••	O1 211	J
A1198	N CH ₂	Н	Н	CF₂H	0
11100	, CH				
A1199	CH₂ N	Н	Н	CF₂H	0
A1200	CH ₃ ON=CHCH ₂	Н	Н	CF₂H	0
A1201	O=CHCH ₂	н	Н	CF₂H	0
A1202	CH₃CH=CH	Н	Н	CF₃	0
A1203	CH₃SO₂NH	H	Н	CF₃	0
A1204	CH₃CH₂CH₂O	Н	CH₃	CF₃	0
A1205	CI	CH₃	Н	CF₃	0
A1206	F ₂ CHO	н	Н	CF₃	0
A1207	CH ₃ CH ₂ C(O)OCH ₂	н	Н	CF₃	0
A1208	CH ₃ CH ₂ OC(O)OCH ₂	н	Н	CF ₃	0
	, -		-	0	-

Comp. No.	. R ₂	R_3	$R_{\!\scriptscriptstyle{4}}$	R_5	р
A1209	CH ₃ OCH ₂ OCH ₂	H	H	CF₃	0
A1210	CH₃	Н	Н	CF₃	1
A1211	CH₃CH₂	Н	Н	CF₃	1
A1212	cyclopropyl	Н	Н	CF₃	1
A1213	CH ₃ (CH ₂) ₂	Н	Н	CF₃	1
A1214	CH₃OCH₂	Н	Н	CF ₃	1
A1215	CF₃	Н	Н	CF₃	1
A1216	F₂CH	Н	Н	CF₃	1
A1217	CICH ₂	Н	Н	CF₃	1
A1218	CH ₃ SO ₂ CH ₂	Н	Н	CF₃	1
A1219	CH₃	CF ₃	Н	CH₃	1
A1220	CH ₃ CH ₂ OCH ₂	Н	Н	CF ₃	1
A1221	PhOCH ₂	Н	Н	CF ₃	1
A1222	(CH ₃) ₂ CH ₂ OCH ₂	Н	Н	CF ₃	1
A1223	BrCH ₂	Н	Н	CF ₃	1
A1224	FCH ₂	Н	Н	CF ₃	1
A1225	N SO ₂ CH ₂	Н	Н	CF₃	1
A1226	O N SO ₂ CH ₂	Н	Н	CF ₃	1.
A1227	cyclopropyl-CH ₂	Н	Н	CF₃	1
A1228	2,2-dichlorocycloprop-1-	Н	H	CF ₃	1
	yl				
A1229	(CH ₃) ₂ NCH ₂	Н	Н	CF ₃	1
A1230	HOCH ₂	Н	Н	CF ₃	1
A1231	CH ₃ C(O)OCH ₂	Н	Н	CF ₃	1
A1232	PhC(O)OCH ₂	Н	Н	CF ₃	1
A1233	PhCH ₂	Н	н	CF ₃	1
A1234	CH ₃ OC(O)CH ₂	Н	. H	CF ₃	1
A1235	NCCH ₂	Н	Н	CF ₃	1
A1236	CH ₃ (CH ₂) ₇ SO ₂ CH ₂	Н	Н	CF ₃	1
A1237	Br	Н	н	CF ₃	1

	_	_	_		
Comp. No.		R ₃	R_4	R_5	р
A1238	Cl	Н	Н	CF ₃	1
A1239	O=CHCH ₂	Н	Н	CF ₃	1
A1240	CH ₃	Н	Н	CF ₂ CI	1
A1241	CH₃CH₂	Н	Н	CF ₂ CI	1
A1242	cyclopropyl	Н	Н	CF ₂ CI	1
A1243	CH ₃ (CH ₂) ₂	Н	Н	CF ₂ Cl	1
A1244	CH₃OCH₂	Н	Н	CF ₂ CI	1
A1245	CF ₃	Н	н	CF₂CI	1
A1246	F₂CH	Н	Н	CF₂CI	1
A1247	CICH ₂	Н	н	CF₂CI	1
A1248	CH ₃ SO ₂ CH ₂	Н	н	CF ₂ CI	1
A1249	CH₃	CF₃	н	CF ₂ CI	1
A1250	CH₃CH₂OCH₂	Н	н	CF₂CI	1
A1251	PhOCH₂	Н	Н	CF₂CI	1
A1252	(CH ₃) ₂ CH ₂ OCH ₂	н	н	CF₂CI	1
A1253	BrCH ₂	Н	н	CF₂CI	1
A1254	FCH₂	Н	Н	CF ₂ CI	1
A1255	N SO ₂ CH ₂	Н	н	CF ₂ CI	1
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				
A1256	O N SO ₂ CH ₂	Н	н	CF ₂ Cl	1
	Ň				
A 4 0 5 77				o= o:	
A1257	cyclopropyl-CH ₂	H	Н	CF ₂ Cl	1
A1258	2,2-dichlorocycloprop-1-	Н	Н	CF ₂ Cl	1
	yl				
A1259	(CH₃)₂NCH₂	Н	Н	CF₂CI	1
A1260	HOCH₂	Н	Н	CF ₂ CI	1
A1261	CH ₃ C(O)OCH ₂	Н	Н	CF ₂ CI	1
A1262	PhC(O)OCH ₂	Н	Н	CF ₂ CI	1
A1263	PhCH ₂	Н	Н	CF ₂ Cl	1
A1264	CH₃OC(O)CH₂	Н	Н	CF ₂ CI	1
A1265	NCCH₂	Н	Н	CF ₂ Cl	1
A1266	CH ₃ (CH ₂) ₇ SO ₂ CH ₂	Н	Н	CF ₂ CI	1

Comp. No	. R ₂	R_3	R ₄	R_5	р
A1267	Br	Н	Н	CF₂CI	1
A1268	CI	Н	Н	CF ₂ Cl	1
A1269	O=CHCH ₂	Н	Н	CF ₂ CI	1
A1270	CH ₃	Н	Н	CF ₂ H	1
A1271	CH₃CH₂	Н	Н	CF₂H	1
A1272	cyclopropyl	Н	Н	CF₂H	1
A1273	$CH_3(CH_2)_2$	Н	Н	CF₂H	1
A1274	CH ₃ OCH ₂	Н	Н	CF₂H	1
A1275	CF ₃	Н	Н	CF₂H	1
A1276	F₂CH	Н	Н	CF₂H	1
A1277	CICH ₂	Н	Н	CF ₂ H	1
A1278	CH ₃ SO ₂ CH ₂	Н	Н	CF₂H	1
A1279	CH₃	CF ₃	Н	CF₂H	1
A1280	CH ₃ CH ₂ OCH ₂	Н	Н	CF ₂ H	1
A1281	PhOCH ₂	н	Н	CF ₂ H	1
A1282	(CH ₃) ₂ CH ₂ OCH ₂	Н	Н	CF₂H	1
A1283	BrCH ₂	Н	н	CF ₂ H	1
A1284	FCH ₂	Н	Н	CF ₂ H	1
A1285	N SO ₂ CH ₂	Н	Н	CF₂H	1
A1286	O N SO ₂ CH ₂	Н	Н	CF₂H	1
A1287	cyclopropyl-CH₂	н	Н	CF₂H	1
A1288	2,2-dichlorocycloprop-1-	н	Н	CF₂H	1
	yl				
A1289	(CH ₃) ₂ NCH ₂	Н	н	CF₂H	1
A1290	HOCH ₂	Н	Н	CF₂H	1
A1291	CH ₃ C(O)OCH ₂	Н	Н	CF₂H	1
A1292	PhC(O)OCH ₂	н	Н	CF₂H	1
A1293	PhCH₂	Н	Н	CF₂H	1
A1294	CH ₃ OC(O)CH ₂	Н	Н	CF₂H	1
A1295	NCCH ₂	Н	Н	CF₂H	1

Comp. No.	R ₂	R ₃	R_4	R_5	р
A1296	CH ₃ (CH ₂) ₇ SO ₂ CH ₂	Н	Н	CF₂H	1
A1297	Br	Н	Н	CF ₂ H	1
A1298	CI	Н	Н	CF ₂ H	1
A1299	O=CHCH ₂	Н	Н	CF₂H	1
A1300	CH₃	Н	Н	CF ₃ CF ₂	1
A1301	НО	Н	Ph	CF₃	0
A1302	CH ₃	Н	CH ₂ =CH	CF ₃	0
A1303	CH ₃	Н	CH₃CH₂O	CF ₃	0
A1304	НО	CH₃	Н	CF ₃	0
A1305	НО	Н	Н	CF ₃	0
A1306	(CH ₃ CH ₂) ₂ N(O)CO	Н	Н	CF ₃	0
A1307	CH₃	Н	Tosyl-O	CF ₃	0
A1308	CH₃	Н	CH₃CC	CF ₃	0
A1309	CH ₃	Н	HCC	CF ₃	0
A1310	CH₃	Н	CICH ₂ CC	CF ₃	0
A1311	CH₃	Н	PhCH ₂ O	CF ₃	0
A1312	CH₃	Н	CF ₃ SO ₂ O	CF ₃	0
A1313	CH ₃	Н	$(CH_3)_2N$	CF ₃	0
A1314	CH₃	Н	CH₃C(O)O	CF ₃	0
A1315	CH₃	Н	CH₃CH₂C(O)O	CF ₃	0
A1316	CH₃	Н	PhC(O)O	CF ₃	0
A1317	CH₃	Н	3-Pyridyl	CF ₃	0
A1318	CH₃OCH₂OCH₂	Н	н	CF ₂ CI	0
A1319	CH3OCH2OCH2	Н	Н	CF₂H	0
A1320	CH₃OCH₂OCH₂	Н	Н	CF ₂ CF ₃	0
A1321	CH ₃ OCH ₂ OCH ₂	Н	Н	CF ₃	1
A1322	CH₃O	Н	CH₃	CF ₃	0

In Table 2 which follows, Q is Q1

and Q1 the radicals B which follow:

Table 2: Radicals B:

Radical	R_{6}	R ₇	R ₈	R ₉	R ₁₀	W
B1	Н	Н	Н	Н	ОН	CH ₂
B2	CH₃	Н	Н	Н	ОН	CH ₂
B3	CH ₃ CH ₂	Н	Н	Н	ОН	CH ₂
B4	CH₃CH₂CH₂	Н	Н	Н	ОН	CH ₂
B5	(CH ₃) ₂ CH	Н	Н	Н	ОН	CH ₂
B6	(CH₃)₃C	Н	Н	Н	ОН	CH ₂
B7	CH₃S	Н	Н	Н	ОН	CH ₂
B8	CH₃SO	Н	Н	Н	ОН	CH ₂
B9	CH₃SO₂	Н	Н	Н	ОН	CH ₂
B10	Ph	Н	Н	Н	ОН	CH ₂
B11	CH₃O	Н	Н	Н	ОН	CH ₂
B12	CH ₃ OC(O)	Н	Н	Н	ОН	CH ₂
B13	CH ₃ CH ₂ OC(O)	Н	Н	Н	ОН	CH ₂
B14	CH ₂ =CHCH ₂	Н	Н	Н	ОН	CH ₂
B15	HCCCH ₂	Н	Н	Н	ОН	CH ₂
B16	CF ₃	Н	Н	Н	OH	CH ₂
B17	$(CH_3)_2NSO_2$	Н	Н	Н	ОН	CH ₂
B18	(CH₃)₂N	Н	Н	Н	OH ·	CH ₂
B19	PhO	Н	Н	Н	ОН	CH ₂
B20	PhS	Н	Н	Н	ОН	CH ₂
B21	PhSO	Н	Н	Н	ОН	CH ₂
B22	PhSO ₂	Н	Н	Н	ОН	CH ₂

Radical	R_6	R_7	R_8	R ₉	R ₁₀	W
B23	CN	Н	Н	Н	ОН	CH ₂
B24	CH₃	CH ₃	Н	Н	ОН	CH ₂
B25	CH ₃ CH ₂	CH ₃	Н	Н	ОН	CH ₂
B26	CH₃CH₂CH₂	CH ₃	Н	Н	ОН	CH ₂
B27	(CH ₃) ₂ CH	CH₃	Н	Н	ОН	CH ₂
B28	(CH ₃) ₃ C	CH₃	Н	Н	ОН	CH ₂
B29	CH₃S	CH ₃	Н	Н	ОН	CH ₂
B30	CH₃SO	CH ₃	Н	Н	ОН	CH ₂
B31	CH₃SO₂	CH ₃	Н	Н	ОН	CH ₂
B32	Ph	CH₃	Н	Н	ОН	CH ₂
B33	CH₃O	CH ₃	Н	Н	ОН	CH ₂
B34	CH ₃ OC(O)	CH ₃	Н	Н	ОН	CH ₂
B35	$CH_3CH_2OC(O)$	CH ₃	Н	Н	ОН	CH ₂
B36	CH ₂ =CHCH ₂	CH ₃	Н	H	ОН	CH ₂
B37	HCCCH₂	CH ₃	Н	Н	ОН	CH ₂
B38	CF ₃	CH ₃	Н	Н	ОН	CH ₂
B39	$(CH_3)_2NSO_2$	CH ₃	Н	Н	ОН	CH ₂
B40	(CH₃)₂N	CH ₃	Н	Н	ОН	CH_2
B41	PhO	CH ₃	Н	Н	ОН	CH ₂
B42	PhS	CH ₃	Н	Н	ОН	CH ₂
B43	PhSO	CH ₃	Н	Н	ОН	CH ₂
B44	PhSO ₂	CH ₃	Н	Н	ОН	CH ₂
B45	CN	CH ₃	Н	Н	ОН	CH ₂
B46	CH₃	Н	CH ₃	Н	ОН	CH ₂
B47	CH₃CH₂	Н	CH ₃	Н	ОН	CH ₂
B48	CH₃CH₂CH₂	Н	CH ₃	Н	ОН	CH ₂
B49	(CH₃)₂CH	Н	CH₃	Н	ОН	CH ₂
B50	$(CH_3)_3C$	Н	CH ₃	Н	ОН	CH ₂
B51	CH₃S	Н	CH ₃	Н	ОН	CH ₂
B52	CH₃SO	Н	CH₃	Н	ОН	CH ₂
B53	CH ₃ SO ₂	Н	CH ₃	Н	ОН	CH ₂
B54	Ph	Н	CH ₃	Н	ОН	CH ₂
B55	CH₃O	Н	CH ₃	Н	ОН	CH ₂

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B56	CH₃OC(O)	Н	CH₃	Н	ОН	CH ₂
B57	CH ₃ CH ₂ OC(O)	Н	CH ₃	Н	ОН	CH ₂
B58	CH ₂ =CHCH ₂	Н	CH ₃	Н	ОН	CH₂
B59	HCCCH ₂	Н	CH ₃	Н	ОН	CH ₂
B60	CF ₃	Н	CH ₃	Н	ОН	CH ₂
B61	$(CH_3)_2NSO_2$	Н	CH ₃	Н	ОН	CH ₂
B62	(CH ₃)₂N	Н	CH ₃	Н	ОН	CH ₂
B63	PhO	Н	CH₃	Н	ОН	CH ₂
B64	PhS	Н	CH ₃	Н	ОН	CH ₂
B65	PhSO	Н	CH₃	Н	ОН	CH ₂
B66	PhSO ₂	Н	CH₃	Н	ОН	CH ₂
B67	CN	Н	CH ₃	Н	ОН	CH ₂
B68	CH₃	CH ₃	CH ₃	Н	ОН	CH ₂
B69	CH ₃ CH ₂	CH₃	СН₃	Н	ОН	CH ₂
B70	CH ₃ CH ₂ CH ₂	CH ₃	CH ₃	Н	ОН	CH ₂
B71	(CH ₃) ₂ CH	CH₃	CH ₃	Н	ОН	CH ₂
B72	(CH ₃) ₃ C	CH ₃	CH ₃	Н	ОН	CH ₂
B73	CH₃S	CH ₃	CH ₃	Н	ОН	CH ₂
B74	CH₃SO	CH ₃	CH ₃	Н	ОН	CH ₂
B75	CH ₃ SO ₂	CH ₃	CH₃	Н	ОН	CH ₂
B76	Ph	CH ₃	CH₃	Н	ОН	CH ₂
B77	CH₃O	CH ₃	CH₃	Н	ОН	CH ₂
B78	CH ₃ OC(O)	CH ₃	CH₃	Н	ОН	CH ₂
B79	$CH_3CH_2OC(O)$	CH ₃	CH ₃	Н	ОН	CH ₂
B80	CH ₂ =CHCH ₂	CH ₃	CH ₃	Н	ОН	CH ₂
B81	HCCCH ₂	CH ₃	CH ₃	Н	ОН	CH ₂
B82	CF ₃	CH ₃	CH ₃	Н	ОН	CH ₂
B83	$(CH_3)_2NSO_2$	CH ₃	CH ₃	Н	ОН	CH ₂
B84	$(CH_3)_2N$	CH ₃	CH ₃	Н	ОН	CH ₂
B85	PhO	CH₃	CH ₃	Н	ОН	CH ₂
B86	PhS	CH₃	СН₃	Н	ОН	CH ₂
B87	PhSO	CH ₃	CH₃	Н	ОН	CH ₂
B88	PhSO ₂	CH₃	CH ₃	Н	ОН	CH ₂

Radical	$R_{\!\scriptscriptstyle{6}}$	R_7	R_8	R_9	R ₁₀	w
B89	CN	CH₃	CH₃	Н	OH	CH ₂
B90	CH ₃	CH₃	CH ₃	CH₃	ОН	CH ₂
B91	CH ₃ CH ₂	CH₃	CH₃	CH₃	ОН	CH ₂
B92	CH ₃ CH ₂ CH ₂	CH₃	CH₃	CH₃	ОН	CH ₂
B93	(CH ₃) ₂ CH	CH₃	CH₃	CH₃	ОН	CH ₂
B94	(CH ₃) ₃ C	CH₃	СНз	CH ₃	ОН	CH ₂
B95	CH₃S	CH₃	СНз	CH ₃	ОН	CH ₂
B96	CH₃SO	СН₃	СН₃	СН3	ОН	CH ₂
B97	CH₃SO₂	CH ₃	СН₃	СН₃	ОН	CH ₂
B98	Ph	CH ₃	СН₃	СН₃	ОН	CH ₂
B99	CH₃O	CH ₃	СН₃	CH ₃	ОН	CH ₂
B100	CH₃OC(O)	CH₃	СНз	CH ₃	ОН	CH ₂
B101	CH ₃ CH ₂ OC(O)	CH₃	CH₃	CH ₃	ОН	CH ₂
B102	CH ₂ =CHCH ₂	CH₃	СН₃	CH ₃	ОН	CH ₂
B103	HCCCH₂	CH ₃	СН₃	CH ₃	ОН	CH ₂
B104	CF ₃	CH₃	СН₃	CH ₃	ОН	CH ₂
B105	$(CH_3)_2NSO_2$	CH₃	СН3	CH ₃	ОН	CH ₂
B106	(CH₃)₂N	CH ₃	CH ₃	CH ₃	ОН	CH ₂
B107	PhO	CH ₃	CH ₃	CH ₃	ОН	CH ₂
B108	PhS	CH₃	CH ₃	CH ₃	ОН	CH ₂
B109	PhSO	СН₃	CH ₃	CH ₃	ОН	CH ₂
B110	PhSO ₂	CH₃	CH_3	CH ₃	ОН	CH ₂
B111	CN	CH₃	CH ₃	CH ₃	ОН	CH ₂
B112	CH ₃ CH ₂	CH ₃ CH ₂	Н	Н	ОН	CH ₂
B113	CH ₃ CH ₂ CH ₂	CH ₃ CH ₂	Н	Н	ОН	CH ₂
B114	(CH ₃)₂CH	CH₃CH₂	Н	Н	ОН	CH ₂
B115	(CH₃)₃C	CH₃CH₂	H	Н	ОН	CH ₂
B116	CH₃S	CH₃CH₂	Н	Н	ОН	CH ₂
B117	CH₃SO	CH ₃ CH ₂	Н	Н	ОН	CH ₂
B118	CH ₃ SO ₂	CH₃CH₂	Н	Н	ОН	CH ₂
B119	Ph	CH ₃ CH ₂	Н	Н	ОН	CH ₂
B120	CH₃O	CH ₃ CH ₂	Н	Н	ОН	CH_2
B121	CH₃OC(O)	CH ₃ CH ₂	Н	Н	ОН	CH ₂

Radical	R_{6}	R_7	R ₈	R ₉	R ₁₀	W
B122	CH₃CH₂OC(O)	CH₃CH₂	H	H	ОН	CH ₂
B123	CH ₂ =CHCH ₂	CH₃CH₂	Н	Н	ОН	CH ₂
B124	HCCCH ₂	CH ₃ CH ₂	Н	Н	ОН	- CH₂
B125	CF₃	CH₃CH₂	Н	Н	ОН	CH₂
B126	(CH ₃) ₂ NSO ₂	CH ₃ CH ₂	Н	Н	ОН	CH₂
B127	(CH₃)₂N	CH ₃ CH ₂	Н	Н	ОН	CH₂
B128	PhO	CH ₃ CH ₂	Н	Н	ОН	CH₂
B129	PhS	CH ₃ CH ₂	Н	Н	ОН	CH₂
B130	PhSO	CH ₃ CH ₂	Н	Н	ОН	CH ₂
B131	PhSO ₂	CH ₃ CH ₂	Н	Н	ОН	CH ₂
B132	CN	CH ₃ CH ₂	Н	Н	ОН	CH ₂
B133	Н	Н	Н	Н	ОН	CHCH ₃
B134	CH ₃	Н	Н	Н	ОН	CHCH ₃
B135	CH ₃ CH ₂	Н	Н	Н	ОН	CHCH ₃
B136	CH ₃ CH ₂ CH ₂	Н	Н	Н	ОН	CHCH₃
B137	(CH ₃) ₂ CH	Н	Н	Н	ОН	CHCH ₃
B138	$(CH_3)_3C$	Н	Н	Н	ОН	CHCH₃
B139	CH₃S	Н	Н	Н	ОН	CHCH₃
B140	CH₃SO	Н	Н	Н	ОН	CHCH₃
B141	CH ₃ SO ₂	Н	Н	Н	ОН	CHCH₃
B142	Ph	Н	Н	Н	ОН	CHCH₃
B143	CH₃O	Н	Н	Н	ОН	CHCH ₃
B144	CH₃OC(O)	Н	Н	Н	ОН	CHCH₃
B145	CH ₃ CH ₂ OC(O)	Н	Н	Н	ОН	CHCH₃
B146	CH ₂ =CHCH ₂	Н	Н	Н	ОН	CHCH ₃
B147	HCCCH ₂	Н	Н	Н	ОН	CHCH₃
B148	CF ₃	Н	Н	Н	ОН	CHCH₃
B149	$(CH_3)_2NSO_2$	Н	Н	Н	ОН	CHCH ₃
B150	(CH₃)₂N	Н	Н	Н	ОН	CHCH ₃
B151	PhO	Н	Н	Н	OH	CHCH ₃
B152	PhS	H	Н	Н	ОН	CHCH ₃
B153	PhSO	Н	Н	Н	ОН	CHCH ₃
B154	PhSO ₂	Н	Н	Н	ОН	CHCH ₃

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B155	CN	Н	Н	Н	ОН	CHCH ₃
B156	CH ₃	CH₃	Н	Н	ОН	CHCH ₃
B157	CH ₃ CH ₂	CH₃	Н	Н	ОН	CHCH₃
B158	CH ₃ CH ₂ CH ₂	CH₃	Н	Н	ОН	CHCH ₃
B159	(CH ₃) ₂ CH	CH ₃	Н	Н	ОН	CHCH ₃
B160	$(CH_3)_3C$	CH ₃	Н	Н	ОН	CHCH₃
B161	CH₃S	CH₃	Н	Н	ОН	CHCH₃
B162	CH₃SO	CH ₃	Н	Н	ОН	CHCH₃
B163	CH ₃ SO ₂	CH ₃	Н	Н	ОН	CHCH ₃
B164	Ph	CH ₃	Н	H	ОН	CHCH ₃
B165	CH₃O	CH ₃	Н	Н	ОН	CHCH ₃
B166	CH₃OC(O)	CH ₃	Н	Н	ОН	CHCH ₃
B167	CH₃CH₂OC(O)	CH ₃	Н	Н	ОН	CHCH₃
B168	CH ₂ =CHCH ₂	CH ₃	Н	Ĥ	OH	CHCH ₃
B169	HCCCH₂	CH ₃	Н	Н	ОН	CHCH ₃
B170	CF ₃	CH₃	Н	Н	ОН	CHCH₃
B171	$(CH_3)_2NSO_2$	CH ₃	Н	Н	ОН	CHCH ₃
B172	$(CH_3)_2N$	CH ₃	Н	Н	ОН	CHCH ₃
B173	PhO	CH ₃	Н	Н	ОН	СНСН₃
B174	PhS	CH ₃	Н	Н	ОН	CHCH ₃
B175	PhSO	CH ₃	Н	Н	ОН	CHCH ₃
B176	PhSO ₂	CH ₃	Н	Н	ОН	CHCH₃
B177	CN	CH₃	Н	Н	ОН	CHCH₃
B178	CH ₃	Н	CH ₃	Н	ОН	CHCH₃
B179	CH₃CH₂	Н	CH ₃	Н	ОН	CHCH ₃
B180	CH ₃ CH ₂ CH ₂	Н	CH₃	Н	ОН	CHCH₃
B181	(CH ₃)₂CH	H	CH ₃	Н	ОН	CHCH₃
B182	(CH₃)₃C	Н	CH ₃	Н	ОН	CHCH₃
B183	CH₃S	Н	СН3	Н	ОН	CHCH₃
B184	CH₃SO	Н	СН₃	Н	ОН	CHCH₃
B185	CH₃SO₂	Н	СН3	Н	ОН	CHCH₃
B186	Ph	Н	СН3	Н	ОН	CHCH₃
B187	CH₃O	Н	CH ₃	Н	ОН	CHCH₃

Radical	R_{6}	R_7	R ₈	R ₉	R ₁₀	W
B188	CH₃OC(O)	Н	СН₃	Н	ОН	CHCH ₃
B189	CH ₃ CH ₂ OC(O)	Н	CH₃	Н	ОН	CHCH ₃
B190	CH ₂ =CHCH ₂	Н	СН₃	Н	ОН	CHCH ₃
B191	HCCCH ₂	Н	СН3	Н	ОН	CHCH ₃
B192	CF ₃	Н	СН₃	Н	ОН	CHCH ₃
B193	$(CH_3)_2NSO_2$	Н	CH₃	Н	ОН	CHCH₃
B194	(CH ₃) ₂ N	Н	CH ₃	Н	ОН	CHCH ₃
B195	PhO	Н	CH ₃	Н	ОН	CHCH ₃
B196	PhS	Н	CH ₃	Н	ОН	CHCH ₃
B197	PhSO	Н	CH ₃	Н	ОН	CHCH₃
B198	PhSO ₂	Н	CH ₃	Н	ОН	CHCH ₃
B199	CN	Н	СН3	Н	ОН	CHCH ₃
B200	CH ₃	CH ₃	CH ₃	Н	ОН	CHCH ₃
B201	CH ₃ CH ₂	CH ₃	CH ₃	Н	ОН	CHCH₃
B202	CH ₃ CH ₂ CH ₂	CH ₃	CH ₃	Н	ОН	CHCH ₃
B203	(CH ₃) ₂ CH	CH ₃	CH ₃	Н	ОН	CHCH ₃
B204	(CH₃)₃C	CH ₃	CH ₃	Н	ОН	CHCH₃
B205	CH₃S	CH ₃	CH₃	Н	ОН	CHCH ₃
B206	CH₃SO	CH ₃	CH ₃	Н	ОН	CHCH ₃
B207	CH ₃ SO ₂	CH ₃	CH₃	Н	ОН	CHCH ₃
B208	Ph	CH ₃	CH ₃	Н	ОН	CHCH ₃
B209	CH₃O	CH ₃	CH ₃	Н	ОН	CHCH ₃
B210	CH₃OC(O)	CH ₃	CH ₃	Н	ОН	CHCH ₃
B211	$CH_3CH_2OC(O)$	CH₃	CH ₃	Н	ОН	CHCH ₃
B212	CH ₂ =CHCH ₂	CH ₃	CH ₃	Н	ОН	CHCH ₃
B213	HCCCH₂	CH ₃	CH₃	Н	ОН	CHCH ₃
B214	CF ₃	CH ₃	CH ₃	Н	ОН	CHCH ₃
B215	$(CH_3)_2NSO_2$	CH ₃	CH ₃	Н	ОН	CHCH ₃
B216	$(CH_3)_2N$	CH ₃	CH ₃	Н	ОН	CHCH₃
B217	PhO	CH₃	CH₃	Н	ОН	CHCH₃
B218	PhS	CH₃	CH ₃	Н	ОН	CHCH₃
B219	PhSO	CH₃	CH ₃	Н	ОН	CHCH₃
B220	PhSO ₂	CH ₃	CH ₃	Н	ОН	CHCH₃

Radical	R_6	R_7	R_8	R_9		R ₁₀	W
B221	CN	, CH₃	CH₃	H		OH	VV CHCH₃
B222	CH₃	CH₃		 CH₃		ОН	CHCH₃
B223	CH₃CH₂	CH₃		CH ₃		ОН	CHCH₃
B224	CH ₃ CH ₂ CH ₂	CH₃		CH ₃		ОН	CHCH₃
B225	(CH ₃) ₂ CH	CH₃		CH₃		ОН	CHCH₃
B226	(CH ₃) ₃ C	CH₃		CH₃		ОН	CHCH ₃
B227	CH₃S	CH₃		CH ₃		ОН	CHCH ₃
B228	CH₃SO	CH₃		CH₃		ОН	CHCH ₃
B229	CH₃SO₂	CH₃		CH₃		ОН	CHCH ₃
B230	Ph	CH₃		CH ₃		ОН	CHCH₃
B231	CH₃O	CH₃		CH ₃		ОН	CHCH ₃
B232	CH₃OC(O)	CH₃		CH ₃		ОН	CHCH₃
B233	CH ₃ CH ₂ OC(O)	CH₃		CH ₃		ОН	CHCH ₃
B234	CH ₂ =CHCH ₂	СН₃	-	CH ₃		ОН	CHCH₃
B235	HCCCH ₂	СН₃	CH ₃	CH₃		ОН	CHCH ₃
B236	CF₃	СН₃		CH₃		ОН	CHCH ₃
B237	(CH ₃) ₂ NSO ₂	СН₃	CH₃	CH₃		ОН	CHCH ₃
B238	(CH₃)₂N	CH ₃	CH ₃	СН₃		ОН	CHCH ₃
B239	PhO	CH ₃	СН₃	CH ₃		ОН	CHCH ₃
B240	PhS	CH₃	СН₃	СН₃		ОН	CHCH ₃
B241	PhSO	СН₃	СН3	CH ₃		ОН	CHCH₃
B242	PhSO ₂	CH ₃	CH ₃	CH ₃		ОН	CHCH₃
B243	CN	CH ₃	СН₃	CH₃	•	ОН	CHCH ₃
B244	CH₃CH₂	CH ₃ CH ₂	Н	Н		ОН	CHCH₃
B245	CH ₃ CH ₂ CH ₂	CH ₃ CH ₂	Н	Н		ОН	CHCH₃
B246	(CH ₃) ₂ CH	CH ₃ CH ₂	Н	Н		ОН	CHCH₃
B247	(CH ₃) ₃ C	CH₃CH₂	Н	Н		ОН	CHCH₃
B248	CH₃S	CH₃CH₂	Н	Н		ОН	CHCH₃
B249	CH₃SO	CH ₃ CH ₂	Н	Н		ОН	CHCH₃
B250	CH ₃ SO ₂	CH₃CH₂	Н	Н		ОН	CHCH ₃
B251	Ph	CH ₃ CH ₂	Н	Н		ОН	CHCH₃
B252	CH₃O	CH ₃ CH ₂	Н	Н		ОН	CHCH ₃
B253	CH₃OC(O)	CH ₃ CH ₂	Н	Н		ОН	CHCH₃

Radical	R_{6}	R ₇	R_8	R_9	R ₁₀	W
B254	CH ₃ CH ₂ OC(O)	CH ₃ CH ₂	Н	Н	ОН	CHCH₃
B255	CH ₂ =CHCH ₂	CH ₃ CH ₂	Н	Н	ОН	CHCH₃
B256	HCCCH ₂	CH ₃ CH ₂	Н	Н	ОН	CHCH₃
B257	CF ₃	CH ₃ CH ₂	Н	Н	ОН	CHCH₃
B258	$(CH_3)_2NSO_2$	CH ₃ CH ₂	Н	Н	ОН	CHCH₃
B259	$(CH_3)_2N$	CH ₃ CH ₂	Н	Н	ОН	CHCH₃
B260	PhO	CH ₃ CH ₂	Н	Н	ОН	CHCH₃
B261	PhS	CH ₃ CH ₂	Н	Н	ОН	CHCH₃
B262	PhSO	CH₃CH₂	Н	Н	ОН	CHCH₃
B263	PhSO ₂	CH ₃ CH ₂	Н	Н	ОН	CHCH₃
B264	CN	CH ₃ CH ₂	Н	Н	ОН	CHCH₃
B265	Н	Н	Н	Н	ОН	C=O
B266	CH₃	Н	Н	Н	ОН	C=O
B267	CH ₃ CH ₂	Н	Н	Н	ОН	C=O
B268	CH ₃ CH ₂ CH ₂	Н	Н	Н	ОН	C=O
B269	(CH₃)₂CH	Н	Н	Н	ОН	C=O
B270	(CH₃)₃C	Н	Н	Н	ОН	C=O
B271	CH₃S	Н	Н	Н	ОН	C=O
B272	CH₃SO	Н	Н	Н	ОН	C=O
B273	CH ₃ SO ₂	Н	Н	Н	ОН	C=O
B274	Ph	Н	Н	Н	ОН	C=O
B275	CH₃O	Н	Н	Н	ОН	C=O
B276	CH ₃ OC(O)	Н	Н	Н	ОН	C=O
B277	CH ₃ CH ₂ OC(O)	Н	Н	Н	ОН	C=O
B278	CH ₂ =CHCH ₂	Н	Н	Н	ОН	C=O
B279	HCCCH₂	Н	Н	Н	ОН	C=O
B280	CF ₃	Н	Н	Н	ОН	C=O
B281	$(CH_3)_2NSO_2$	Н	Н	Н	ОН	C=O
B282	(CH₃)₂N	Н	Н	Н	OH .	C=O
B283	PhO	Н	Н	Н	ОН	C=O
B284	PhS	Н	Н	Н	ОН	C=O
B285	PhSO	Н	Н	Н	ОН	C=O
B286	PhSO ₂	Н	Н	Н	ОН	C=O

Radical	R_6	R ₇	R_8	R_9	R ₁₀	W
B287	CN	Н	Н	Н	ОН	C=O
B288	CH₃	CH₃	Н	Н	ОН	C=O
B289	CH₃CH₂	CH₃	Н	Н	ОН	C=O
B290	CH ₃ CH ₂ CH ₂	CH₃	Н	Н	ОН	C=O
B291	(CH ₃) ₂ CH	CH₃	Н	Н	ОН	C=O
B292	(CH ₃) ₃ C	CH₃	Н	Н	ОН	C=O
B293	CH₃S	CH₃	Н	Н	ОН	C=O
B294	CH₃SO	CH₃	Н	Н	ОН	C=O
B295	CH₃SO₂	CH₃	Н	Н	ОН	C=O
B296	Ph	CH ₃	Н	Н	ОН	C=O
B297	CH₃O	CH ₃	Н	Н	ОН	C=O
B298	CH₃OC(O)	CH₃	Н	Н	ОН	C=O
B299	CH ₃ CH ₂ OC(O)	CH ₃	Н	Н	ОН	C=O
B300	CH ₂ =CHCH ₂	CH ₃	Н	Н	ОН	C=O
B301	HCCCH₂	CH ₃	Н	Н	ОН	C=O
B302	CF ₃	CH ₃	Н	Н	ОН	C=O
B303	$(CH_3)_2NSO_2$	CH₃	Н	Н	ОН	C=O
B304	(CH₃)₂N	CH ₃	Н	Н	ОН	C=O
B305	PhO	CH ₃	Н	Н	ОН	C=O
B306	PhS	CH₃	Н	Н	ОН	C=O
B307	PhSO	CH ₃	Н	Н	ОН	C=O
B308	PhSO ₂	CH₃	Н	Н	ОН	C=O
B309	CN	CH₃	Н	Н	ОН	C=O
B310	CH₃	Н	CH ₃	Н	ОН	C=O
B311	CH₃CH₂	Н	CH_3	Н	ОН	C=O
B312	CH₃CH₂CH₂	Н	CH_3	Н	ОН	C=O
B313	(CH₃)₂CH	Н	CH ₃	Н	ОН	C=O
B314	$(CH_3)_3C$	Н	CH ₃	Н	ОН	C=O
B315	CH₃S	Н	CH₃	Н	ОН	C=O
B316	CH₃SO	Н	CH ₃	Н	ОН	C=O
B317	CH₃SO₂	Н	CH₃	Н	ОН	C=O
B318	Ph	Н	CH ₃	Н	ОН	C=O
B319	CH ₃ O	Н	CH ₃	Н	ОН	C=O

Padical	Р	В	5	_	-	
Radical	R ₆	R_7	R ₈	R ₉	R ₁₀	W
B320	CH ₃ OC(O)	Н	CH₃	Н	OH	C=0
B321	CH₃CH₂OC(O)	H	CH₃	Н	ОН	C=O
B322	CH ₂ =CHCH ₂	Н	CH₃	Н	ОН	C=O
B323	HCCCH₂	Н	CH₃	Н	ОН	C=O
B324	CF₃	Н	CH₃	Н	ОН	C=O
B325	$(CH_3)_2NSO_2$	Н	CH₃	Н	ОН	C=O
B326	(CH₃)₂N	Н	CH₃	Н	ОН	C=O
B327	PhO	Н	CH ₃	Н	ОН	C=O
B328	PhS	Н	CH ₃	Н	ОН	C=O
B329	PhSO	Н	CH₃	Н	ОН	C=O
B330	PhSO ₂	Н	CH ₃	Н	ОН	C=O
B331	CN	Н	CH₃	Н	OH	C=O
B332	CH₃	CH ₃	CH ₃	Н	ОН	C=O
B333	CH₃CH₂	CH ₃	CH_3	Н	ОН	C=O
B334	CH₃CH₂CH₂	CH ₃	СНз	Н	ОН	C=O
B335	(CH₃)₂CH	CH ₃	CH ₃	Н	ОН	C=O
B336	(CH ₃) ₃ C	CH ₃	СНз	Н	ОН	C=O
B337	CH₃S	CH ₃	CH_3	Н	ОН	C=O
B338	CH₃SO	CH₃	CH₃	Н	ОН	C=O
B339	CH ₃ SO ₂	CH₃	CH ₃	Н	ОН	C=O
B340	Ph	CH₃	CH ₃	Н	ОН	C=O
B341	CH₃O	CH₃	СН₃	Н	ОН	C=O
B342	CH₃OC(O)	CH ₃	СН₃	Н	ОН	C=O
B343	CH ₃ CH ₂ OC(O)	CH₃	CH₃	Н	ОН	C=O
B344	CH ₂ =CHCH ₂	CH₃	CH ₃	Н	ОН	C=O
B345	HCCCH₂	CH ₃	CH₃	Н	ОН	C=O
B346	CF ₃	CH ₃	CH ₃	Н	ОН	C=O
B347	(CH ₃) ₂ NSO ₂	CH ₃	СН₃	Н	ОН	C=O
B348	$(CH_3)_2N$	CH ₃	СН₃	Н	ОН	C=O
B349	PhO	СН₃	СН₃	Н	ОН	C=O
B350	PhS	CH₃	CH₃	Н	ОН	C=O
B351	PhSO	CH₃	CH₃	Н	ОН	C=O
B352	PhSO ₂	CH ₃	CH₃	Н	ОН	C=O

Radical	R_6	R_7	R_8	R ₉	R ₁₀	W
B353	CN	CH ₃	CH₃	Н	OH	C=O
B354	CH₃	CH₃	СН₃	СН₃	ОН	C=O
B355	CH₃CH₂	CH ₃	CH₃	СН₃	ОН	C=O
B356	CH₃CH₂CH₂	CH ₃	CH₃	СН₃	ОН	C=O
B357	(CH ₃) ₂ CH	CH₃	СНз	CH₃	ОН	C=O
B358	$(CH_3)_3C$	CH₃	СН₃	CH ₃	ОН	C=O
B359	CH₃S	CH₃	СН₃	CH ₃	ОН	C=O
B360	CH₃SO	CH₃	СН3	СН3	ОН	C=O
B361	CH ₃ SO ₂	CH₃	CH ₃	CH ₃	ОН	C=O
B362	Ph	CH₃	СН₃	CH₃	ОН	C=O
B363	CH₃O	CH ₃	СН3	CH ₃	ОН	C=O
B364	CH ₃ OC(O)	CH ₃	CH₃	CH ₃	ОН	C=O
B365	CH₃CH₂OC(O)	CH ₃	CH ₃	CH ₃	ОН	C=O
B366	CH ₂ =CHCH ₂	CH ₃	CH ₃	CH_3	ОН	C=O
B367	HCCCH₂	CH ₃	CH_3	CH ₃	ОН	C=O
B368	CF ₃	CH ₃	СH ₃	CH ₃	ОН	C=O
B369	$(CH_3)_2NSO_2$	CH ₃	CH ₃	CH ₃	ОН	C=O
B370	(CH₃)₂N	CH ₃	CH ₃	CH ₃	ОН	C=O
B371	PhO	CH ₃	CH ₃	CH ₃	ОН	C=O
B372	PhS	CH ₃	CH₃	CH ₃	ОН	C=O
B373	PhSO	CH ₃	CH₃	CH ₃	ОН	C=O
B374	PhSO ₂	CH ₃	CH ₃	CH ₃	ОН	C=O
B375	CN	CH ₃	CH ₃	CH ₃	ОН	C=O
B376	CH₃CH₂	CH₃CH₂	Н	Н	ОН	C=O
B377	CH ₃ CH ₂ CH ₂	CH ₃ CH ₂	Н	Н	ОН	C=O
B378	(CH ₃) ₂ CH	CH ₃ CH ₂	Н	Н	ОН	C=O
B379	(CH ₃) ₃ C	CH₃CH₂	Н	Н	OH	C=O
B380	CH₃S	CH₃CH₂	Н	Н	ОН	C=O
B381	CH₃SO	CH ₃ CH ₂	Н	Н	ОН	C=O
B382	CH₃SO₂	CH ₃ CH ₂	Н	Н	ОН	C=O
B383	Ph	CH₃CH₂	Н	Н	ОН	C=O
B384	CH₃O	CH ₃ CH ₂	Н	Н	ОН	C=O
B385	CH₃OC(O)	CH ₃ CH ₂	Н	Н	ОН	C=O

Radical	R_{6}	R_7	R_8	R ₉	R ₁₀	W
B386	CH₃CH₂OC(O)	CH ₃ CH ₂	Н	Н	ОН	C=O
B387	CH ₂ =CHCH ₂	CH₃CH₂	Н	Н	ОН	C=O
B388	HCCCH₂	CH₃CH₂	Н	Н	ОН	C=O
B389	CF ₃	CH₃CH₂	Н	Н	ОН	C=O
B390	$(CH_3)_2NSO_2$	CH₃CH₂	Н	Н	ОН	C=O
B391	$(CH_3)_2N$	CH ₃ CH ₂	Н	H	ОН	C=O
B392	PhO	CH ₃ CH ₂	Н	Н	ОН	C=O
B393	PhS	CH₃CH₂	Н	Н	ОН	C=O
B394	PhSO	CH ₃ CH ₂	Н	H	ОН	C=O
B395	PhSO ₂	CH ₃ CH ₂	Н	Н	ОН	C=O
B396	CN	CH ₃ CH ₂	Н	Н	ОН	C=O
B397	Н	Н	Н	Н	ОН	N-CH ₃
B398	CH ₃	Н	Н	Н	ОН	N-CH ₃
B399	CH₃CH₂	Н	Н	Н	ОН	N-CH ₃
B400	CH ₃ CH ₂ CH ₂	Н	Н	Н	ОН	N-CH ₃
B401	(CH₃)₂CH	Н	Н	Н	ОН	N-CH ₃
B402	(CH₃)₃C	Н	Н	Н	ОН	N-CH₃
B403	CH₃S	Н	Н	Н	ОН	N-CH ₃
B404	CH₃SO	Н	Н	Н	ОН	N-CH₃
B405	CH ₃ SO ₂	Н	Н	Н	ОН	N-CH₃
B406	Ph	Н	Н	Н	ОН	N-CH₃
B407	CH₃O	Н	Н	Н	ОН	N-CH₃
B408	CH ₃ OC(O)	Н	Н	H	ОН	N-CH₃
B409	CH ₃ CH ₂ OC(O)	Н	Н	Н	ОН	N-CH ₃
B410	CH ₂ =CHCH ₂	H	Н	Н	ОН	N-CH₃
B411	HCCCH₂	H	Н	Н	ОН	N-CH ₃
B412	CF ₃	Н	Н	Н	ОН	N-CH₃
B413	$(CH_3)_2NSO_2$	Н	Н	Н	ОН	N-CH₃
B414	$(CH_3)_2N$	Н	Н	Н	OH .	N-CH ₃
B415	PhO	Н	Н	Н	ОН	N-CH₃
B416	PhS	Н	Н	Н	ОН	N-CH₃
B417	PhSO	Н	Н	Н	ОН	N-CH ₃
B418	PhSO ₂	Н	Н	Н	ОН	N-CH ₃

Radical	R_{6}	R ₇	R_8	R_9	R ₁₀	W
B419	CN	Н	Н	Н	ОН	N-CH₃
B420	CH₃	CH₃	Н	Н	ОН	N-CH₃
B421	CH₃CH₂	CH₃	Н	Н	ОН	N-CH ₃
B422	CH ₃ CH ₂ CH ₂	CH₃	Н	Н	ОН	N-CH₃
B423	(CH ₃) ₂ CH	CH₃	Н	Н	ОН	N-CH₃
B424	(CH ₃) ₃ C	CH ₃	Н	Н	ОН	N-CH₃
B425	CH₃S	CH ₃	Н	Н	ОН	N-CH₃
B426	CH₃SO	CH ₃	Н	Н	ОН	N-CH₃
B427	CH₃SO₂	CH ₃	Н	Н	ОН	N-CH ₃
B428	Ph	CH ₃	Н	Н	ОН	N-CH₃
B429	CH₃O	CH ₃	Н	Н	ОН	N-CH₃
B430	CH₃OC(O)	CH ₃	Н	Н	ОН	N-CH₃
B431	CH₃CH₂OC(O)	CH ₃	Н	Н	ОН	N-CH₃
B432	CH ₂ =CHCH ₂	CH ₃	Н	Н	ОН	N-CH ₃
B433	HCCCH₂	CH ₃	Н	Н	ОН	N-CH₃
B434	CF ₃	CH₃	Н	Н	ОН	N-CH ₃
B435	$(CH_3)_2NSO_2$	CH ₃	Н	Н	ОН	N-CH ₃
B436	(CH₃)₂N	CH₃	Н	Н	ОН	N-CH ₃
B437	PhO	CH ₃	Н	Н	ОН	N-CH ₃
B438	PhS	CH ₃	Н	Н	ОН	N-CH ₃
B439	PhSO	CH₃	Н	Н	ОН	N-CH ₃
B440	PhSO ₂	CH₃	Н	Н	ОН	N-CH ₃
B441	CN	CH₃	Н	Н	ОН	N-CH ₃
B442	CH ₃	H	CH ₃	Н	ОН	N-CH ₃
B443	CH₃CH₂	Н	CH ₃	Н	ОН	N-CH ₃
B444	CH ₃ CH ₂ CH ₂	Н	CH ₃	Н	ОН	N-CH ₃
B445	(CH ₃) ₂ CH	Н	CH ₃	Н	ОН	N-CH₃
B446	$(CH_3)_3C$	Н	CH₃	Н	ОН	N-CH₃
B447	CH₃S	Н	CH ₃	Н	ОН	N-CH₃
B448	CH₃SO	Н	CH ₃	Н	ОН	N-CH₃
B449	CH₃SO₂	Н	CH ₃	Н	ОН	N-CH ₃
B450	Ph	н	CH_3	Н	ОН	N-CH₃
B451	CH₃O	Н	CH ₃	Н	ОН	N-CH₃

R_{6}	R _z	R _s	R₀	B ₁₀	W
					N-CH₃
CH₃CH₂OC(O)					N-CH₃
CH ₂ =CHCH ₂		_			N-CH₃
HCCCH ₂	Н		Н		N-CH₃
CF ₃	Н	CH ₃	Н	ОН	N-CH₃
(CH ₃) ₂ NSO ₂	Н	CH ₃	Н	ОН	N-CH₃
(CH₃)₂N	н	СН3	Н	ОН	N-CH₃
PhO	Н	СН₃	Н	ОН	N-CH₃
PhS	Н	CH₃	Н	ОН	N-CH₃
PhSO	Н	CH₃	Н	ОН	N-CH₃
PhSO ₂	Н	CH ₃	Н	ОН	N-CH₃
CN	Н	CH ₃	Н	ОН	N-CH₃
CH ₃	CH₃	СН₃	Н	ОН	N-CH₃
CH ₃ CH ₂	CH ₃	CH ₃	Н	ОН	N-CH₃
CH ₃ CH ₂ CH ₂	CH ₃	CH ₃	Н	ОН	N-CH₃
(CH ₃) ₂ CH	CH₃	СН₃	Н	ОН	N-CH₃
$(CH_3)_3C$	СН₃	CH_3	Н	ОН	N-CH ₃
CH₃S	CH₃	СНз	Н	ОН	N-CH ₃
CH₃SO	CH ₃	CH ₃	Н	ОН	N-CH ₃
CH₃SO₂	CH ₃	CH₃	Н	ОН	N-CH ₃
Ph	CH ₃	CH ₃	Н	ОН	N-CH ₃
CH₃O	CH ₃	CH₃	Н	ОН	N-CH ₃
CH₃OC(O)	CH ₃	CH ₃	Н	ОН	N-CH₃
CH ₃ CH ₂ OC(O)	CH ₃	CH ₃	Н	ОН	N-CH₃
CH ₂ =CHCH ₂	CH ₃	CH₃	Н	ОН	N-CH ₃
HCCCH ₂	CH ₃	CH₃	Н	ОН	N-CH₃
CF ₃	CH ₃	CH ₃	Н	ОН	N-CH₃
$(CH_3)_2NSO_2$	CH ₃	CH ₃	Н	ОН	N-CH₃
$(CH_3)_2N$	CH ₃	CH₃	Н	ОН	N-CH₃
PhO	CH ₃	CH ₃	Н	ОН	N-CH₃
PhS	CH ₃	CH₃	Н	ОН	N-CH ₃
PhSO	CH ₃	СH ₃	Н	ОН	N-CH₃
PhSO ₂	CH ₃	CH₃	Н	ОН	N-CH ₃
	CH ₂ =CHCH ₂ HCCCH ₂ CF ₃ (CH ₃) ₂ NSO ₂ (CH ₃) ₂ N PhO PhS PhSO PhSO ₂ CN CH ₃ CH ₃ CH ₂ CH ₃ CH (CH ₃) ₃ C CH ₃ SO CH ₃ CO CH ₃ CH (CH ₃) ₃ C CH (CH ₃) ₃ C CH ₃ SO CH CH ₃ SO CH	CH ₃ OC(O) H CH ₃ CH ₂ OC(O) H CH ₂ =CHCH ₂ H HCCCH ₂ H CF ₃ H (CH ₃) ₂ NSO ₂ H (CH ₃) ₂ NSO ₂ H PhO H PhS H PhSO H PhSO ₂ H CN H CH ₃ CH ₃ CH ₃ CH ₂ CH ₃ CH ₃ CH ₂ CH ₃ CH ₃ CH ₂ CH ₃ CH ₃ S CH ₃ CH ₃ S CH ₃ CH ₃ SO CH ₃ CH ₃ O CH ₃ CH ₃ O CH ₃ CH ₃ CO(O) CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ COC(O) CH ₃ CH ₃ CH ₂ COC(O) CH ₃ CH ₃ CH ₂ COC(O) CH ₃ CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ COC(O) CH ₃ CH ₃ CH ₂ COC(O) CH ₃ CH ₃ COC(O) CH ₃ CH ₃ COC(O) CH ₃ CH ₃ COC(O) CH ₃	CH ₃ OC(O) H CH ₃ CH ₂ CH ₂ OC(O) H CH ₃ CH ₂ =CHCH ₂ H CH ₃ HCCCH ₂ H CH ₃ (CF ₃ H CH ₃ (CH ₃) ₂ NSO ₂ H CH ₃ PhO H CH ₃ PhSO H CH ₃ PhSO ₂ H CH ₃ CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ (CH ₃) ₂ CH CH ₃ CH ₃ CH ₃ SO CH ₃ CH ₃ CH ₃ SO CH ₃ CH ₃ CH ₃ SO CH ₃ CH ₃ CH ₃ CO(O) CH ₃ CH ₃ CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ CH ₃ CO(O) CH ₃ CH ₃ CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ CH ₃ CO(O) CH ₃ CH ₃ CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ CH ₃ CO(O) CH ₃ CH ₃ CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ CH ₃ CO(O) CH ₃ CH ₂ CH ₂ CH ₂ CH ₃ CH ₂ CH ₂ CH ₂ CH ₃ CH ₃ CH ₃ CH ₂ CH ₂ CH ₂ CH ₃ CH ₃ CH ₃ CH ₂ CH ₂ CH ₃ CH ₃ CH ₃ CH ₂ CH ₂ CH ₃ PhO CH ₃ CH ₃ CH ₃ PhS CH ₃ CH ₃ CH ₃	CH ₃ OC(O) H CH ₃ H CH ₃ CH ₂ OC(O) H CH ₃ H CH ₂ =CHCH ₂ H CH ₃ H CCCH ₂ H CH ₃ H CF ₃ H CH ₃ H (CH ₃) ₂ NSO ₂ H CH ₃ H PhO H CH ₃ H PhSO H CH ₃ H CN H CH ₃ H CH ₃ CH CH ₃ CH ₂ CH CH ₃ CH ₂ CH CH ₃ CH CH CH ₃ CH CH ₃ CH CH CH ₃ CH CH CH ₃ CH CH CH ₃ CH CH CH CH ₃ CH C	CH₃OC(O) H CH₃ H OH CH₃CH₂OC(O) H CH₃ H OH CH₂ECHCH₂ H CH₃ H OH HCCCH₂ H CH₃ H OH CF₃ H CH₃ H OH (CH₃)₂NSO₂ H CH₃ H OH (CH₃)₂NSO₂ H CH₃ H OH PhO H CH₃ H OH PhO H CH₃ H OH PhS H CH₃ H OH PhSO₂ H CH₃ H OH PhSO₂ H CH₃ H OH CH₃ CH₃ H OH OH CH₃ CH₃ H OH OH CH₃ CH₃ CH₃ H OH OH CH₃ CH₃ CH₃ H OH OH CH₃CH₂ CH₃ CH₃ CH₃ H OH OH CH₃SCH₂ CH₃ CH₃ CH₃ H OH OH CH₃SO₂ CH₃ CH₃ CH₃ H OH OH

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B485	CN	CH₃	CH₃	Н	ОН	N-CH ₃
B486	CH₃	CH₃	CH₃	CH₃	ОН	N-CH ₃
B487	CH₃CH₂	CH ₃	CH ₃	CH ₃	ОН	N-CH ₃
B488	CH ₃ CH ₂ CH ₂	CH ₃	СНз	CH ₃	ОН	N-CH₃
B489	(CH ₃) ₂ CH	CH ₃	CH₃	CH ₃	ОН	N-CH₃
B490	(CH₃)₃C	CH ₃	CH ₃	CH ₃	ОН	N-CH ₃
B491	CH₃S	CH ₃	CH₃	CH_3	ОН	N-CH₃
B492	CH₃SO	CH ₃	CH ₃	CH ₃	ОН	N-CH₃
B493	CH₃SO₂	CH ₃	СН3	CH₃	ОН	N-CH₃
B494	Ph	CH ₃	СНз	CH ₃	ОН	N-CH₃
B495	CH₃O	CH ₃	CH ₃	CH ₃	ОН	N-CH₃
B496	CH ₃ OC(O)	CH₃	CH ₃	CH ₃	ОН	N-CH₃
B497	CH ₃ CH ₂ OC(O)	CH ₃	СН₃	CH ₃	ОН	N-CH₃
B498	CH ₂ =CHCH ₂	CH₃	СН₃	CH ₃	ОН	N-CH₃
B499	HCCCH₂	CH₃	СН₃	CH ₃	ОН	N-CH₃
B500	CF ₃	CH ₃	СН ₃	CH ₃	ОН	N-CH₃
B501	$(CH_3)_2NSO_2$	CH ₃	СН₃	CH ₃	ОН	N-CH₃
B502	$(CH_3)_2N$	CH ₃	СН3	CH ₃	ОН	N-CH₃
B503	PhO	CH ₃	СН₃	CH ₃	ОН	N-CH₃
B504	PhS	CH₃	СН₃	CH ₃	ОН	N-CH₃
B505	PhSO	CH₃	СН₃	CH ₃	ОН	N-CH ₃
B506	PhSO ₂	CH₃	СН₃	CH ₃	ОН	N-CH ₃
B507	CN	CH₃	CH ₃	CH ₃	ОН	N-CH₃
B508	CH₃CH₂	CH₃CH₂	Н	Н	ОН	N-CH₃
B509	CH₃CH₂CH₂	CH ₃ CH ₂	Н	Н	ОН	N-CH₃
B510	(CH₃)₂CH	CH ₃ CH ₂	Н	Н	ОН	N-CH₃
B511	(CH₃)₃C	CH₃CH₂	Н	Н	ОН	N-CH₃
B512	CH₃S	CH₃CH₂	Н	Н	ОН	N-CH ₃
B513	CH₃SO	CH ₃ CH ₂	Н	Н	ОН	N-CH₃
B514	CH ₃ SO ₂	CH₃CH₂	Н	Н	ОН	N-CH₃
B515	Ph	CH₃CH₂	Н	Н	ОН	N-CH ₃
B516	CH₃O	CH₃CH₂	Н	Н	ОН	N-CH ₃
B517	CH ₃ OC(O)	CH₃CH₂	Н	Н	ОН	N-CH ₃
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Radical	R_{6}	R_7	R_8	R ₉	R ₁₀	W
B518	CH ₃ CH ₂ OC(O)	CH₃CH₂	Н	н	ОН	N-CH₃
B519	CH ₂ =CHCH ₂	CH₃CH₂	Н	Н	ОН	N-CH₃
B520	HCCCH₂	CH ₃ CH ₂	Н	Н	ОН	N-CH₃
B521	CF₃	CH ₃ CH ₂	Н	Н	ОН	N-CH₃
B522	(CH ₃) ₂ NSO ₂	CH₃CH₂	Н	Н	ОН	N-CH₃
B523	(CH ₃) ₂ N	CH₃CH₂	Н	Н	ОН	N-CH₃
B524	PhO	CH₃CH₂	Н	Н	ОН	N-CH₃
B525	PhS	CH ₃ CH ₂	Н	Н	ОН	N-CH₃
B526	PhSO	CH ₃ CH ₂	Н	Н	ОН	N-CH ₃
B527	PhSO₂	CH ₃ CH ₂	Н	Н	ОН	N-CH₃
B528	CN	CH ₃ CH ₂	Н	Н	ОН	N-CH₃
B529	Н	Н	Н	Н	ОН	0
B530	CH₃	Н	Н	Н	ОН	0
B531	CH₃CH₂	Н	Н	Н	ОН	0
B532	CH₃CH₂CH₂	Н	Н	Н	ОН	0
B533	(CH₃)₂CH	Н	Н	Н	ОН	0
B534	(CH ₃) ₃ C	Н	Н	Н	ОН	0
B535	CH₃S	Н	Н	Н	ОН	0
B536	CH₃SO	Н	Н	Н	ОН	0
B537	CH ₃ SO ₂	Н	Н	Н	ОН	0
B538	Ph	Н	Н	Н	ОН	0
B539	CH₃O	Н	Н	Н	ОН	0
B540	CH₃OC(O)	Н	Н	Н	ОН	0
B541	CH ₃ CH ₂ OC(O)	Н	Н	Н	ОН	0
B542	CH ₂ =CHCH ₂	Н	Н	Н	ОН	0
B543	HCCCH ₂	Н	Н	Н	ОН	0
B544	CF ₃	Н	Н	Н	ОН	0
B545	$(CH_3)_2NSO_2$	Н	Н	Н	ОН	0
B546	(CH₃)₂N	Н	Н	Н	ОН	0
B547	PhO	Н	Н	Н	ОН	0
B548	PhS	Н	Н	Н	ОН	0
B549	PhSO	Н	Н	Н	ОН	0
B550	PhSO ₂	Н	Н	Н	ОН	0

Radical	R_6	R ₇	R_8	R ₉	R ₁₀	W
B551	CN	Н	Н	Н	ОН	0
B552	CH₃	CH₃	Н	Н	ОН	0
B553	CH₃CH₂	СН₃	Н	Н	ОН	0
B554	CH₃CH₂CH₂	CH₃	Н	Н	ОН	0
B555	(CH ₃) ₂ CH	CH_3	Н	Н	ОН	0
B556	(CH ₃) ₃ C	СН₃	Н	Н	ОН	0
B557	CH₃S	CH₃	Н	Н	ОН	0
B558	CH₃SO	СН3	Н	Н	ОН	0
B559	CH₃SO₂	CH ₃	Н	Н	ОН	0
B560	Ph	CH ₃	Н	Н	ОН	0
B561	CH₃O	CH ₃	Н	Н	ОН	0
B562	CH₃OC(O)	СН₃	Н	Н	ОН	0
B563	CH ₃ CH ₂ OC(O)	CH ₃	Н	Н	ОН	0
B564	CH ₂ =CHCH ₂	CH ₃	Н	Н	ОН	0
B565	HCCCH₂	CH ₃	Н	Н	ОН	0
B566	CF ₃	CH ₃	Н	Н	ОН	0
B567	$(CH_3)_2NSO_2$	CH ₃	Н	Н	ОН	0
B568	$(CH_3)_2N$	CH ₃	Н	Н	ОН	0
B569	PhO	CH ₃	Н	Н	ОН	0
B570	PhS	CH ₃	Н	Н	ОН	0
B571	PhSO	CH ₃	Н	Н	ОН	0
B572	PhSO ₂	CH ₃	Н	Н	ОН	0
B573	CN	CH₃	Н	Н	ОН	0
B574	CH₃	Н	CH ₃	Н	ОН	0
B575	CH₃CH₂	Н	CH ₃	Н	ОН	0
B576	CH ₃ CH ₂ CH ₂	Н	CH₃	Н	ОН	0
B577	(CH ₃) ₂ CH	Н	CH ₃	Н	ОН	0
B578	$(CH_3)_3C$	Н	CH₃	Н	ОН	0
B579	CH₃S	Н	CH₃	Н	ОН	0
B580	CH₃SO	Н	CH₃	Н	ОН	0
B581	CH₃SO₂	Н	СН₃	Н	ОН	0
B582	Ph	Н	CH₃	Н	ОН	0
B583	CH₃O	Н	CH ₃	Н	ОН	0

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B584	CH₃OC(O)	Н	CH ₃	Н	ОН	0
B585	CH₃CH₂OC(O)	Н	СН₃	Н	ОН	0
B586	CH ₂ =CHCH ₂	Н	СН₃	Н	ОН	0
B587	HCCCH ₂	Н	CH ₃	Н	ОН	0
B588	CF ₃	Н	CH₃	Н	ОН	0
B589	$(CH_3)_2NSO_2$	Н	CH₃	Н	ОН	0
B590	$(CH_3)_2N$	Н	СН₃	Н	ОН	0
B591	PhO	Н	CH ₃	Н	ОН	0
B592	PhS	Н	CH ₃	Н	ОН	0
B593	PhSO	Н	CH ₃	Н	ОН	0
B594	PhSO ₂	Н	CH ₃	Н	ОН	0
B595	CN	Н	CH ₃	Н	ОН	0
B596	CH₃	CH ₃	CH₃	Н	ОН	0
B597	CH ₃ CH ₂	СН₃	СН₃	Н	ОН	0
B598	CH ₃ CH ₂ CH ₂	CH_3	СН₃	Н	ОН	0
B599	(CH ₃) ₂ CH	CH₃	СН₃	Н	ОН	0
B600	(CH₃)₃C	CH ₃	CH ₃	Н	ОН	0
B601	CH₃S	CH ₃	CH_3	Н	ОН	0
B602	CH₃SO	CH ₃	СН3	Н	OH	0
B603	CH ₃ SO ₂	CH ₃	CH₃	Н	ОН	0
B604	Ph	CH ₃	CH ₃	Н	ОН	0
B605	CH₃O	CH ₃	CH ₃	Н	ОН	0
B606	CH₃OC(O)	CH ₃	CH ₃	Н	ОН	0
B607	$CH_3CH_2OC(O)$	CH ₃	CH ₃	Н	ОН	0
B608	CH ₂ =CHCH ₂	CH ₃	CH_3	Н	ОН	0
B609	HCCCH₂	CH ₃	СН₃	Н	ОН	0
B610	CF ₃	CH ₃	CH₃	Н	ОН	0
B611	$(CH_3)_2NSO_2$	CH₃	CH ₃	Н	ОН	0
B612	$(CH_3)_2N$	CH ₃	СН₃	Н	ОН	0
B613	PhO	CH ₃	CH₃	Н	ОН	0
B614	PhS	CH ₃	CH ₃	Н	ОН	0
B615	PhSO	CH ₃	CH_3	Н	ОН	0
B616	PhSO ₂	CH ₃	CH ₃	Н	ОН	0

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B617	CN	CH₃	CH ₃	Н	ОН	0
B618	CH ₃	CH₃	CH ₃	CH₃	ОН	0
B619	CH₃CH₂	CH₃	CH ₃	CH₃	ОН	0
B620	CH₃CH₂CH₂	CH₃	CH₃	CH ₃	ОН	0
B621	(CH₃)₂CH	CH ₃	CH ₃	CH ₃	ОН	0
B622	$(CH_3)_3C$	CH ₃	СН3	CH ₃	ОН	0
B623	CH₃S	CH ₃	СНз	CH ₃	ОН	0
B624	CH₃SO	CH ₃	СН3	CH ₃	ОН	0
B625	CH ₃ SO ₂	CH ₃	СН₃	СH ₃	ОН	0
B626	Ph	CH₃	СН3	СН3	ОН	0
B627	CH₃O	CH ₃	CH_3	СНз	ОН	0
B628	CH ₃ OC(O)	CH ₃	СН₃	СН₃	ОН	0
B629	CH₃CH₂OC(O)	CH ₃	СНз	СН3	ОН	0
B630	CH ₂ =CHCH ₂	CH ₃	СН3	СН3	ОН	0
B631	HCCCH₂	CH ₃	СНз	СН₃	ОН	0
B632	CF ₃	CH ₃	СН3	CH ₃	ОН	0
B633	$(CH_3)_2NSO_2$	CH₃	СН3	CH ₃	ОН	0
B634	$(CH_3)_2N$	CH ₃	CH ₃	CH ₃	ОН	0
B635	PhO	CH ₃	СН3	СН3	ОН	0
B636	PhS	CH ₃	CH ₃	CH ₃	ОН	0
B637	PhSO	CH ₃	СН₃	CH ₃	ОН	0
B638	PhSO ₂	CH₃	СН₃	CH ₃	ОН	0
B639	CN	CH ₃	СН₃	СН3	ОН	0
B640	CH₃CH₂	CH ₃ CH ₂	Н	Н	ОН	0
B641	CH ₃ CH ₂ CH ₂	CH ₃ CH ₂	Н	Н	ОН	0
B642	(CH ₃) ₂ CH	CH ₃ CH ₂	Н	Н	ОН	0
B643	(CH₃)₃C	CH ₃ CH ₂	Н	Н	ОН	0
B644	CH₃S	CH ₃ CH ₂	Н	Н	ОН	0
B645	CH₃SO	CH ₃ CH ₂	Н	Н	ОН	0
B646	CH ₃ SO ₂	CH ₃ CH ₂	Н	Н	ОН	0
B647	Ph	CH ₃ CH ₂	Н	Н	ОН	0
B648	CH₃O	CH ₃ CH ₂	Н	Н	ОН	0
B649	CH ₃ OC(O)	CH ₃ CH ₂	Н	Н	ОН	0

R ₆	_	_	_	_	
0	R_7	R_8	R_9	R ₁₀	W
CH ₃ CH ₂ OC(O)	CH ₃ CH ₂	Н	Н	ОН	0
CH ₂ =CHCH ₂	CH ₃ CH ₂	Н	Н	ОН	0
HCCCH₂	CH ₃ CH ₂	Н	Н	ОН	0
CF ₃	CH ₃ CH ₂	Н	Н	ОН	0
$(CH_3)_2NSO_2$	CH ₃ CH ₂	Н	Н	ОН	0
$(CH_3)_2N$	CH ₃ CH ₂	Н	Н	ОН	0
PhO	CH ₃ CH ₂	Н	Н	ОН	0
PhS	CH ₃ CH ₂	Н	Н	ОН	0
PhSO	CH ₃ CH ₂	Н	Н	ОН	0
PhSO ₂	CH₃CH₂	Н	Н	ОН	0
CN	CH₃CH₂	Н	Н	ОН	0
Н	Н	Н	Н	ОН	S
CH ₃	Н	Н	Н	ОН	S
CH ₃ CH ₂	Н	Н	Н	ОН	S
CH ₃ CH ₂ CH ₂	Н	Н	Н	ОН	S
$(CH_3)_2CH$	Н	Н	Н	ОН	S
$(CH_3)_3C$	Н	Н	Н	ОН	S
CH₃S	Н	Н	Н	ОН	S
CH₃SO	Н	Н	Н	ОН	S
CH ₃ SO ₂	Н	Н	Н	ОН	S
Ph	Н	Н	Н	ОН	S
CH₃O	Н	Н	Н	ОН	S
CH₃OC(O)	Н	Н	Н	ОН	S
CH ₃ CH ₂ OC(O)	Н	Н	Н	ОН	S
CH ₂ =CHCH ₂	Н	Н	Н	ОН	S
HCCCH ₂	Н	Н	Н	ОН	S
CF ₃	Н	Н	Н	ОН	S
$(CH_3)_2NSO_2$	Н	Н	Н	ОН	S
$(CH_3)_2N$	Н	Н	Н	ОН	S
PhO	Н	Н	Н	ОН	S
PhS	Н	Н	Н	ОН	S
PhSO	Н	Н	Н	ОН	S
PhSO ₂	Н	Н	Н	ОН	S
	CH ₃ CH ₂ OC(O) CH ₂ =CHCH ₂ HCCCH ₂ CF ₃ (CH ₃) ₂ NSO ₂ (CH ₃) ₂ N PhO PhS PhSO PhSO ₂ CN H CH ₃ CH ₃ CH ₂ CH ₃ CH ₂ (CH ₃) ₂ CH (CH ₃) ₃ C CH ₃ S CH ₃ SO CH ₃ SO CH ₃ SO CH ₃ SO CH ₃ CO(O) CH ₂ =CHCH ₂ HCCCH ₂ CF ₃ (CH ₃) ₂ NSO ₂ (CH ₃) ₂ NSO ₂ (CH ₃) ₂ N PhO PhS PhSO	CH3CH2OC(O) CH3CH2 CH2=CHCH2 CH3CH2 HCCCH2 CH3CH2 CF3 CH3CH2 (CH3)2NSO2 CH3CH2 (CH3)2N CH3CH2 PhO CH3CH2 PhSO CH3CH2 PhSO2 CH3CH2 PhSO2 CH3CH2 Ph H CH3CH2 H CH3SO H CH3SO H CH3O H CH3O H CH3CO H CH3CH2 H CH3SO H CH3CH2 H CH3CH2 H CH3CH2 H CH3CH2 H <t< td=""><td>CH₃CH₂OC(O) CH₃CH₂ H CH₂=CHCH₂ CH₃CH₂ H HCCCH₂ CH₃CH₂ H CF₃ CH₃CH₂ H (CH₃)₂NSO₂ CH₃CH₂ H (CH₃)₂N CH₃CH₂ H PhO CH₃CH₂ H PhS CH₃CH₂ H PhSO CH₃CH₂ H PhSO₂ CH₃CH₂ H CN CH₃CH₂ H H H H CH₃CH₂ H H CH₃CH₂ H H CH₃CH₂CH₂ H H (CH₃)₂CH H H (CH₃)₂CH H H CH₃SO₂ H H CH₃SO₂ H H Ph H H CH₃OC(O) H H CH₂=CHCH₂ H H HCCH₃)₂NSO₂ H H</td><td>CH₃CH₂OC(O) CH₃CH₂ H H CH₂=CHCH₂ CH₃CH₂ H H HCCCH₂ CH₃CH₂ H H CF₃ CH₃CH₂ H H (CH₃)₂NSO₂ CH₃CH₂ H H PhO CH₃CH₂ H H PhS CH₃CH₂ H H PhSO CH₃CH₂ H H CN CH₃CH₂ H H CH₃ H H CH₃ H H H CH₃ H H H CH₃ H H H CH₃ CH₂ H H CH₃CH₂ H H H CH₃SO H H H H CH₃SO H H H H CH₃SO₂ H H H CH₃OC(O) H H H CH₃CH₂OC(O) H H H CH₂=CHCH₂ H H H CF₃ H H H CF₃ H H H CF₃ H H H CH₃CH₂CH H H H CH₃CO₂ H H H H CH₃CO₃CO H H H H H CH₃CO₃CO H H H H CH₃CO₃CO H H H H H CH₃CO H H H H H</td><td>CH₃CH₂OC(O) CH₃CH₂ H H OH CH₂=CHCH₂ CH₅CH₂ H H OH HCCCH₂ CH₅CH₂ H H OH CF₃ CH₃CH₂ H H OH (CH₃)₂NSO₂ CH₃CH₂ H H OH (CH₃)₂N CH₃CH₂ H H OH PhO CH₃CH₂ H H OH PhS CH₃CH₂ H H OH PhSO CH₅CH₂ H H OH PhSO₂ CH₃CH₂ H H OH CN CH₃CH₂ H H OH CN CH₃CH₂ H H OH CH₃CH₂ CH H H OH CH₃CH₂ CH H H OH CH₃SO₂ H H H OH CH₃CO(O) H H H OH CH₃CH₂CO(O) H H H OH CH₂CH₂CH₂ H H OH CF₃ H H H OH CH₃CH₂CO(O) H H H OH CF₃ H H H OH CF₃ H H H OH CF₃ H H H OH CH₃CN₂ H H H OH CH₃CN₂CO(O) H H H OH CH₃CN₂CO(O) H H H OH CH₃CH₂CO(O) H H H OH CH₃CH₂CO(O) H H H OH CH₃CH₂CO(O) H H H OH CF₃ H H H OH</td></t<>	CH ₃ CH ₂ OC(O) CH ₃ CH ₂ H CH ₂ =CHCH ₂ CH ₃ CH ₂ H HCCCH ₂ CH ₃ CH ₂ H CF ₃ CH ₃ CH ₂ H (CH ₃) ₂ NSO ₂ CH ₃ CH ₂ H (CH ₃) ₂ N CH ₃ CH ₂ H PhO CH ₃ CH ₂ H PhS CH ₃ CH ₂ H PhSO CH ₃ CH ₂ H PhSO ₂ CH ₃ CH ₂ H CN CH ₃ CH ₂ H H H H CH ₃ CH ₂ H H CH ₃ CH ₂ H H CH ₃ CH ₂ CH ₂ H H (CH ₃) ₂ CH H H (CH ₃) ₂ CH H H CH ₃ SO ₂ H H CH ₃ SO ₂ H H Ph H H CH ₃ OC(O) H H CH ₂ =CHCH ₂ H H HCCH ₃) ₂ NSO ₂ H H	CH ₃ CH ₂ OC(O) CH ₃ CH ₂ H H CH ₂ =CHCH ₂ CH ₃ CH ₂ H H HCCCH ₂ CH ₃ CH ₂ H H CF ₃ CH ₃ CH ₂ H H (CH ₃) ₂ NSO ₂ CH ₃ CH ₂ H H PhO CH ₃ CH ₂ H H PhS CH ₃ CH ₂ H H PhSO CH ₃ CH ₂ H H CN CH ₃ CH ₂ H H CH ₃ H H CH ₃ H H H CH ₃ H H H CH ₃ H H H CH ₃ CH ₂ H H H CH ₃ SO H H H H CH ₃ SO H H H H CH ₃ SO ₂ H H H CH ₃ OC(O) H H H CH ₃ CH ₂ OC(O) H H H CH ₂ =CHCH ₂ H H H CF ₃ H H H CF ₃ H H H CF ₃ H H H CH ₃ CH ₂ CH H H H CH ₃ CO ₂ H H H H CH ₃ CO ₃ CO H H H H H CH ₃ CO ₃ CO H H H H CH ₃ CO ₃ CO H H H H H CH ₃ CO ₃ CO H H H H H CH ₃ CO ₃ CO H H H H H CH ₃ CO ₃ CO H H H H H CH ₃ CO H H H H H	CH ₃ CH ₂ OC(O) CH ₃ CH ₂ H H OH CH ₂ =CHCH ₂ CH ₅ CH ₂ H H OH HCCCH ₂ CH ₅ CH ₂ H H OH CF ₃ CH ₃ CH ₂ H H OH (CH ₃) ₂ NSO ₂ CH ₃ CH ₂ H H OH (CH ₃) ₂ N CH ₃ CH ₂ H H OH PhO CH ₃ CH ₂ H H OH PhS CH ₃ CH ₂ H H OH PhSO CH ₅ CH ₂ H H OH PhSO ₂ CH ₃ CH ₂ H H OH CN CH ₃ CH ₂ H H OH CN CH ₃ CH ₂ H H OH CH ₃ CH ₂ CH H H OH CH ₃ CH ₂ CH H H OH CH ₃ SO ₂ H H H OH CH ₃ CO(O) H H H OH CH ₃ CH ₂ CO(O) H H H OH CH ₂ CH ₂ CH ₂ H H OH CF ₃ H H H OH CH ₃ CH ₂ CO(O) H H H OH CH ₃ CH ₂ CO(O) H H H OH CH ₃ CH ₂ CO(O) H H H OH CH ₃ CH ₂ CO(O) H H H OH CF ₃ H H H OH CF ₃ H H H OH CF ₃ H H H OH CH ₃ CN ₂ H H H OH CH ₃ CN ₂ CO(O) H H H OH CH ₃ CN ₂ CO(O) H H H OH CH ₃ CH ₂ CO(O) H H H OH CH ₃ CH ₂ CO(O) H H H OH CH ₃ CH ₂ CO(O) H H H OH CF ₃ H H H OH

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B683	CN	Н	Н	Н	ОН	S
B684	CH₃	CH₃	Н	Н	ОН	S
B685	CH₃CH₂	CH₃	Н	Н	ОН	S
B686	CH ₃ CH ₂ CH ₂	CH₃	Н	Н	ОН	S
B687	(CH₃)₂CH	CH₃	Н	Н	ОН	S
B688	(CH ₃) ₃ C	CH₃	Н	Н	ОН	S
B689	CH₃S	CH₃	Н	Н	ОН	S
B690	CH₃SO	CH ₃	Н	Н	ОН	S
B691	CH ₃ SO ₂	CH ₃	Н	Н	ОН	S
B692	Ph	CH ₃	Н	Н	ОН	S
B693	CH₃O	СНз	Н	Н	ОН	S
B694	CH₃OC(O)	CH ₃	Н	Н	ОН	S
B695	CH ₃ CH ₂ OC(O)	СН₃	Н	Н	ОН	S
B696	CH ₂ =CHCH ₂	CH ₃	Н	Н	ОН	S
B697	HCCCH₂	CH ₃	Н	Н	ОН	s
B698	CF₃	СН₃	Н	Н	ОН	S
B699	(CH ₃) ₂ NSO ₂	CH₃	Н	Н	ОН	s
B700	(CH ₃)₂N	CH ₃	Н	Н	ОН	S
B701	PhO	CH ₃	Н	Н	ОН	S
B702	PhS	CH ₃	Н	Н	ОН	s
B703	PhSO	CH ₃	Н	Н	ОН	s
B704	PhSO ₂	CH ₃	Н	Н	ОН	s
B705	CN	CH₃	Н	Н	ОН	s
B706	CH₃	Н	CH ₃	Н	ОН	s
B707	CH₃CH₂	Н	CH₃	Н	ОН	S
B708	CH₃CH₂CH₂	Н	СН₃	Н	ОН	S
B709	(CH₃)₂CH	Н	CH₃	Н	ОН	S
B710	(CH₃)₃C	Н	CH₃	Н	ОН	s
B711	CH₃S	Н	CH ₃	Н	ОН	s
B712	CH₃SO	н	CH ₃	Н	ОН	S
B713	CH₃SO₂	н	CH₃	Н	ОН	S
B714	Ph	Н	CH₃	Н	ОН	S
B715	CH₃O	Н	CH ₃	Н	ОН	S
	-		J		-	_

Radical	R_6	R ₇	R_8	R_9	R ₁₀	w
B716	CH ₃ OC(O)	Н	CH ₃	Н	ОН	s
B717	CH ₃ CH ₂ OC(O)	Н	CH₃	Н	ОН	s
B718	CH ₂ =CHCH ₂	Н	СНз	Н	ОН	S
B719	HCCCH ₂	Н	CH ₃	Н	ОН	s
B720	CF ₃	Н	CH ₃	Н	ОН	s
B721	$(CH_3)_2NSO_2$	Н	CH ₃	Н	ОН	s
B722	(CH ₃)₂N	Н	CH₃	Н	ОН	s
B723	PhO	Н	CH₃	Н	ОН	s
B724	PhS	Н	CH₃	Н	ОН	s
B725	PhSO	Н	CH₃	Н	ОН	S
B726	PhSO ₂	Н	CH ₃	Н	ОН	S
B727	CN	Н	CH₃	Н	ОН	S
B728	CH₃	CH₃	CH ₃	Н	ОН	S
B729	CH ₃ CH ₂	СН₃	CH₃	Н	ОН	s
B730	CH ₃ CH ₂ CH ₂	CH ₃	СН₃	Н	ОН	S
B731	(CH₃)₂CH	СНз	CH₃	Н	ОН	s
B732	(CH ₃) ₃ C	CH ₃	CH ₃	Н	ОН	S
B733	CH₃S	СН₃	CH ₃	Н	ОН	S
B734	CH₃SO	CH ₃	CH ₃	Н	ОН	S
B735	CH ₃ SO ₂	CH ₃	CH ₃	Н	ОН	s
B736	Ph	CH ₃	CH ₃	Н	ОН	S
B737	CH₃O	CH ₃	CH ₃	Н	ОН	S
B738	CH₃OC(O)	CH₃	CH ₃	Н	ОН	S
B739	CH ₃ CH ₂ OC(O)	CH ₃	CH ₃	Н	ОН	s
B740	CH ₂ =CHCH ₂	CH ₃	СН₃	Н	ОН	s
B741	HCCCH₂	CH ₃	CH ₃	Н	ОН	s
B742	CF ₃	CH ₃	CH ₃	Н	ОН	s
B743	$(CH_3)_2NSO_2$	CH ₃	CH ₃	Н	ОН	s
B744	(CH ₃) ₂ N	CH ₃	CH₃	Н	ОН	s
B745	PhO	CH ₃	CH ₃	Н	ОН	s
B746	PhS	CH ₃	CH ₃	Н	ОН	S
B747	PhSO	CH ₃	CH ₃	Н	ОН	S
B748	PhSO ₂	CH ₃	СН₃	Н	ОН	S

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B749	CN	CH₃	СH ₃	Н	ОН	S
B750	CH₃	CH ₃	CH₃	CH ₃	ОН	S
B751	CH₃CH₂	CH₃	СН3	CH ₃	ОН	S
B752	CH₃CH₂CH₂	CH ₃	CH ₃	CH ₃	ОН	S
B753	(CH₃)₂CH	CH ₃	CH ₃	CH ₃	ОН	S
B754	(CH₃)₃C	CH ₃	СН3	CH ₃	ОН	S
B755	CH₃S	CH ₃	CH₃	CH ₃	ОН	S
B756	CH₃SO	CH ₃	CH₃	CH ₃	ОН	S
B757	CH ₃ SO ₂	CH ₃	СН3	CH ₃	ОН	S
B758	Ph	CH ₃	CH ₃	CH ₃	ОН	S
B759	CH₃O	CH₃	CH ₃	CH ₃	ОН	S
B760	CH ₃ OC(O)	CH₃	СН₃	CH ₃	ОН	S
B761	CH₃CH₂OC(O)	CH₃	СН₃	CH ₃	ОН	s
B762	CH ₂ =CHCH ₂	CH₃	СН₃	CH ₃	ОН	S
B763	HCCCH ₂	CH ₃	СН3	CH ₃	ОН	S
B764	CF ₃	CH₃	CH ₃	CH ₃	ОН	S
B765	$(CH_3)_2NSO_2$	CH ₃	СН₃	CH ₃	ОН	S
B766	$(CH_3)_2N$	CH ₃	CH₃	CH ₃	ОН	S
B767	PhO	CH ₃	CH₃	CH ₃	ОН	S
B768	PhS	CH ₃	CH ₃	CH ₃	ОН	s
B769	PhSO	CH₃	CH ₃	CH ₃	ОН	S
B770	PhSO ₂	CH₃	CH ₃	СН3	ОН	s
B771	CN	CH ₃	CH ₃	CH ₃	ОН	S
B772	CH₃CH₂	CH₃CH₂	Н	Н	ОН	s
B77 3	CH₃CH₂CH₂	CH₃CH₂	Н	Н	ОН	S
B774	(CH ₃) ₂ CH	CH ₃ CH ₂	Н	Н	ОН	S
B775	(CH₃)₃C	CH ₃ CH ₂	Н	Н	ОН	S
B776	CH₃S	CH ₃ CH ₂	Н	Н	ОН	S
B777	CH₃SO	CH ₃ CH ₂	Н	Н	ОН	S
B778	CH ₃ SO ₂	CH ₃ CH ₂	Н	Н	ОН	S
B779	Ph	CH ₃ CH ₂	Н	Н	ОН	S
B780	CH₃O	CH ₃ CH ₂	Н	Н	ОН	S
B781	CH₃OC(O)	CH ₃ CH ₂	Н	Н	ОН	S

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B782	CH₃CH₂OC(O)	CH₃CH₂	Н	Н	ОН	S
B783	CH ₂ =CHCH ₂	CH₃CH₂	Н	Н	ОН	S
B784	HCCCH₂	CH₃CH₂	Н	Н	ОН	S
B785	CF ₃	CH ₃ CH ₂	Н	Н	ОН	s
B786	$(CH_3)_2NSO_2$	CH ₃ CH ₂	Н	Н	ОН	s
B787	$(CH_3)_2N$	CH ₃ CH ₂	Н	Н	ОН	s
B788	PhO	CH ₃ CH ₂	Н	Н	ОН	S
B789	PhS	CH ₃ CH ₂	Н	Н	ОН	s
B790	PhSO	CH ₃ CH ₂	Н	Н	ОН	S
B791	PhSO ₂	CH ₃ CH ₂	Н	Н	ОН	S
B792	CN	CH ₃ CH ₂	Н	Н	ОН	S
B793	Н	Н	Н	Н	ОН	SO ₂
B794	CH₃	Н	Н	Н	ОН	SO ₂
B795	CH₃CH₂	Н	Н	Н	ОН	SO ₂
B796	CH₃CH₂CH₂	Н	Н	Н	ОН	SO ₂
B797	(CH₃)₂CH	Н	Н	Н	ОН	SO ₂
B798	(CH₃)₃C	Н	Н	Н	ОН	SO ₂
B799	CH₃S	Н	Н	Н	ОН	SO ₂
B800	CH₃SO	,, H	Н	Н	ОН	SO ₂
B801	CH ₃ SO ₂	Н	Н	Н	ОН	SO_2
B802	Ph	Н	Н	Н	ОН	SO ₂
B803	CH₃O	Н	Н	Н	ОН	SO ₂
B804	CH₃OC(O)	H	Н	Н	ОН	SO_2
B805	CH ₃ CH ₂ OC(O)	Н	Н	Н	ОН	SO ₂
B806	CH ₂ =CHCH ₂	Н	Н	Н	ОН	SO ₂
B807	HCCCH₂	Н	Н	Н	ОН	SO ₂
B808	CF ₃	Н	Н	Н	ОН	SO ₂
B809	$(CH_3)_2NSO_2$	Н	Н	Н	ОН	SO ₂
B810	(CH₃)₂N	Н	Н	Н	OH	SO ₂
B811	PhO	Н	Н	Н	OH	SO ₂
B812	PhS	Н	Н	Н	ОН	SO ₂
B813	PhSO	Н	Н	Н	ОН	SO ₂
B814	PhSO₂	Н	Н	Н	ОН	SO ₂

B815 CN H H H H OH S B816 CH ₃ CH ₃ H H OH S B817 CH ₃ CH ₂ CH ₃ H H OH S B818 CH ₃ CH ₂ CH ₂ CH ₃ H H OH S B819 (CH ₃) ₂ CH CH ₃ H H OH S B820 (CH ₃) ₂ CH CH ₃ H H OH S B821 CH ₃ SC CH ₃ H H OH S B822 CH ₃ SO CH ₃ H H OH S B823 CH ₃ SO ₂ CH ₃ H H OH S B824 Ph CH ₃ H H OH S B825 CH ₃ OC(O) CH ₃ H H OH S B826 CH ₃ CH ₂ OC(O) CH ₃ H H OH S	Radical	R_{6}	R_7	R_8	R_9	R ₁₀	w
B816 CH ₃ CH ₃ H H OH S B817 CH ₃ CH ₂ CH ₃ H H OH S B818 CH ₃ CH ₂ CH ₂ CH ₃ H H OH S B819 (CH ₃) ₂ CH CH ₃ H H OH S B820 (CH ₃) ₂ C CH ₃ H H OH S B821 CH ₃ S CH ₃ H H OH S B822 CH ₃ SO CH ₃ H H OH S B823 CH ₃ SO ₂ CH ₃ H H OH S B824 Ph CH ₃ H H OH S B825 CH ₃ OC CH ₃ H H OH S B826 CH ₃ CH ₂ OC CO CH ₃ H H OH S B827 CH ₃ CH ₂ OC CH ₃ H H OH S <tr< td=""><td>B815</td><td></td><td></td><td></td><td></td><td></td><td>SO₂</td></tr<>	B815						SO ₂
B817 CH ₃ CH ₂ CH ₃ H H OH S B818 CH ₃ CH ₂ CH ₂ CH ₃ H H OH S B819 (CH ₃) ₂ CH CH ₃ H H OH S B820 (CH ₃) ₂ C CH ₃ H H OH S B821 CH ₃ S CH ₃ H H OH S B822 CH ₃ SO CH ₃ H H OH S B823 CH ₃ SO ₂ CH ₃ H H OH S B824 Ph CH ₃ H H OH S B825 CH ₃ OC CH ₃ H H OH S B826 CH ₃ OC(O) CH ₃ H H OH S B827 CH ₃ CH ₂ OC(O) CH ₃ H H OH S B829 HCCCH ₂ CH ₃ H H OH S B8	B816	CH₃	СН₃	Н	Н		SO ₂
B818 CH ₃ CH ₂ CH ₂ CH ₃ H H OH S B819 (CH ₃) ₂ CH CH ₃ H H OH S B820 (CH ₃) ₂ CH CH ₃ H H OH S B821 CH ₃ S CH ₃ H H OH S B822 CH ₃ SO CH ₃ H H OH S B823 CH ₃ SO ₂ CH ₃ H H OH S B824 Ph CH ₃ H H OH S B825 CH ₃ OC CH ₃ H H OH S B826 CH ₂ OC(O) CH ₃ H H OH S B827 CH ₂ CHCCH ₂ CH ₃ H H OH S B828 CH ₂ =CHCH ₂ CH ₃ H H OH S B830 CF ₃ CH ₃ H H OH S B83	B817	CH₃CH₂	СН₃	Н	Н	ОН	SO ₂
B820 (CH ₃) ₃ C CH ₃ H H OH OH SE B821 CH ₃ S CH ₃ H H OH OH SE B822 CH ₃ SO CH ₃ H H OH OH SE B823 CH ₃ SO ₂ CH ₃ H H OH OH SE B824 Ph CH ₃ H H OH SE B825 CH ₃ O CH ₃ H H OH SE B826 CH ₃ OC(O) CH ₃ H H OH SE B827 CH ₃ CH ₂ OC(O) CH ₃ H H OH SE B828 CH ₂ =CHCH ₂ CH ₃ H H OH SE B829 HCCCH ₂ CH ₃ H H OH SE B830 CF ₃ CH ₃ H H OH SE B831 (CH ₃) ₂ NSO ₂ CH ₃ H H OH SE B831 (CH ₃) ₂ NSO ₂ CH ₃ H H OH SE B833 PhO CH ₃ H H OH SE B834 PhS CH ₃ H H OH SE B835 PhSO CH ₃ H H OH SE B836 PhSO ₂ CH ₃ H H OH SE B837 CN CH ₃ H H OH SE B838 CH ₃ H SO ₄ H H OH SE B839 CH ₃ CH ₂ H CH ₃ H H OH SE B839 CH ₃ CH ₃ H H OH SE B839 CH ₃ CH ₃ H H OH SE B839 CH ₃ CH ₃ H H OH SE B839 CH ₃ CH ₃ H H OH SE B839 CH ₃ CH ₂ H CH ₃ H OH SE B840 CH ₃ CH ₂ H CH ₃ H OH SE B841 (CH ₃) ₂ CH H CH ₃ H OH SE B842 (CH ₃) ₃ C H CH ₃ H OH SE B844 CH ₃ SO H CH ₃ H OH SE B844 CH ₃ SO H CH ₃ H OH SE B844 CH ₃ SO H CH ₃ H OH SE B845 CH ₃ SO ₂ H CH ₃ H OH SE B846 Ph H CH ₃ H OH	B818	CH ₃ CH ₂ CH ₂	СН₃	Н	Н	ОН	SO ₂
B821 CH₃S CH₃ H H OH S B822 CH₃SO CH₃ H H OH S B823 CH₃SO₂ CH₃ H H OH S B824 Ph CH₃ H H OH S B825 CH₃O CH₃ H H OH S B826 CH₃OC(O) CH₃ H H OH S B827 CH₃CH₂COC(O) CH₃ H H OH S B828 CH₂=CHCH₂ CH₃ H H OH S B829 HCCCH₂ CH₃ H H OH S B830 CF₃ CH₃ H H OH S B831 (CH₃)₂NSO₂ CH₃ H H OH S B833 PhO CH₃ H H OH S B834 PhS CH₃ H<	B819	(CH₃)₂CH	CH₃	Н	Н	ОН	SO ₂
B822 CH ₃ SO CH ₃ H H OH S B823 CH ₃ SO ₂ CH ₃ H H OH S B824 Ph CH ₃ H H OH S B825 CH ₃ O CH ₃ H H OH S B826 CH ₃ OC(O) CH ₃ H H OH S B827 CH ₃ CH ₂ OC(O) CH ₃ H H OH S B828 CH ₂ =CHCH ₂ CH ₃ H H OH S B829 HCCCH ₂ CH ₃ H H OH S B830 CF ₃ CH ₃ H H OH S B831 (CH ₃) ₂ NSO ₂ CH ₃ H H OH S B832 (CH ₃) ₂ NSO ₂ CH ₃ H H OH S B833 PhS CH ₃ H H OH S B834	B820	(CH ₃) ₃ C	CH ₃	Н	Н	ОН	SO ₂
B823 CH ₃ SO ₂ CH ₃ H H OH S B824 Ph CH ₃ H H OH S B825 CH ₃ O CH ₃ H H OH S B826 CH ₃ OC(O) CH ₃ H H OH S B827 CH ₃ CH ₂ OC(O) CH ₃ H H OH S B828 CH ₂ =CHCH ₂ CH ₃ H H OH S B829 HCCCH ₂ CH ₃ H H OH S B830 CF ₃ CH ₃ H H OH S B831 (CH ₃) ₂ NSO ₂ CH ₃ H H OH S B832 (CH ₃) ₂ NSO ₂ CH ₃ H H OH S B833 PhO CH ₃ H H OH S B834 PhSO CH ₃ H H OH S B835 <td>B821</td> <td>CH₃S</td> <td>СНз</td> <td>Н</td> <td>Н</td> <td>ОН</td> <td>SO₂</td>	B821	CH₃S	СНз	Н	Н	ОН	SO ₂
B824 Ph CH ₃ H H OH SE B825 CH ₃ O CH ₃ H H OH SE B826 CH ₃ OC(O) CH ₃ H H OH SE B827 CH ₃ CH ₂ OC(O) CH ₃ H H OH SE B828 CH ₂ =CHCH ₂ CH ₃ H H OH SE B829 HCCCH ₂ CH ₃ H H OH SE B830 CF ₃ CH ₃ H H OH SE B831 (CH ₃) ₂ NSO ₂ CH ₃ H H OH SE B832 (CH ₃) ₂ NN CH ₃ H H OH SE B833 PhO CH ₃ H H OH SE B834 PhS CH ₃ H H OH SE B835 PhSO ₂ CH ₃ H H OH SE B83	B822	CH₃SO	СН₃	Н	Н	ОН	SO ₂
B825 CH ₃ O CH ₃ H H OH SS B826 CH ₃ OC(O) CH ₃ H H OH SS B827 CH ₃ CH ₂ OC(O) CH ₃ H H OH SS B828 CH ₂ =CHCH ₂ CH ₃ H H OH SS B829 HCCCH ₂ CH ₃ H H OH SS B830 CF ₃ CH ₃ H H OH SS B831 (CH ₃) ₂ NSO ₂ CH ₃ H H OH SS B832 (CH ₃) ₂ N CH ₃ H H OH SS B833 PhO CH ₃ H H OH SS B834 PhS CH ₃ H H OH SS B835 PhSO CH ₃ H H OH SS B836 PhSO ₂ CH ₃ H H OH SS B8	B823	CH ₃ SO ₂	CH ₃	H	Н	ОН	SO ₂
B826 CH ₃ OC(O) CH ₃ H H OH SS B827 CH ₃ CH ₂ OC(O) CH ₃ H H OH SS B828 CH ₂ =CHCH ₂ CH ₃ H H OH SS B829 HCCCH ₂ CH ₃ H H OH SS B830 CF ₃ CH ₃ H H OH SS B831 (CH ₃) ₂ NSO ₂ CH ₃ H H OH SS B832 (CH ₃) ₂ N CH ₃ H H OH SS B833 PhO CH ₃ H H OH SS B834 PhS CH ₃ H H OH SS B835 PhSO CH ₃ H H OH SS B836 PhSO ₂ CH ₃ H H OH SS B837 CN CH ₃ H OH SS B843 CH	B824	Ph	CH₃	Н	Н	ОН	SO ₂
B827 CH ₃ CH ₂ OC(O) CH ₃ H H OH OH SS B828 CH ₂ =CHCH ₂ CH ₃ H H OH OH SS B829 HCCCH ₂ CH ₃ H H OH OH SS B830 CF ₃ CH ₃ H H OH SS B831 (CH ₃) ₂ NSO ₂ CH ₃ H H OH SS B832 (CH ₃) ₂ N CH ₃ H H OH SS B833 PhO CH ₃ H H OH SS B834 PhS CH ₃ H H OH SS B835 PhSO CH ₃ H H OH SS B836 PhSO ₂ CH ₃ H H OH SS B837 CN CH ₃ H H OH SS B838 CH ₃ H CH ₃ H OH SS B839 CH ₃ CH ₂ H CH ₃ H OH SS B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH SS B841 (CH ₃) ₂ CH H CH ₃ H OH SS B842 (CH ₃) ₃ C H CH ₃ H OH SS B843 CH ₃ S H CH ₃ H OH SS B844 CH ₃ SO H CH ₃ H OH SS B845 CH ₃ SO H CH ₃ H OH SS B846 Ph CH ₃ SO ₂ H CH ₃ H OH SS B846 Ph CH ₃ SO ₂ H CH ₃ H OH SS B846 Ph CH ₃ SO ₂ H CH ₃ H OH SS B846 Ph CH ₃ H OH SS	B825	CH₃O	CH ₃	Н	Н	ОН	SO ₂
B828 CH2=CHCH2 CH3 H H OH S B829 HCCCH2 CH3 H H OH S B830 CF3 CH3 H H OH S B831 (CH3)2NSO2 CH3 H H OH S B832 (CH3)2N CH3 H H OH S B833 PhO CH3 H H OH S B834 PhS CH3 H H OH S B835 PhSO CH3 H H OH S B836 PhSO2 CH3 H H OH S B837 CN CH3 H H OH S B838 CH3 H CH3 H OH S B849 CH3CH2 H CH3 H OH S B841 (CH3)2CH H CH3	B826	CH₃OC(O)	CH ₃	Н	Н	ОН	SO ₂
B829 HCCCH ₂ CH ₃ H H OH OH SS B830 CF ₃ CH ₃ H H OH OH SS B831 (CH ₃) ₂ NSO ₂ CH ₃ H H OH OH SS B832 (CH ₃) ₂ N CH ₃ H H OH OH SS B833 PhO CH ₃ H H OH SS B834 PhS CH ₃ H H OH SS B835 PhSO CH ₃ H H OH SS B836 PhSO ₂ CH ₃ H H OH SS B837 CN CH ₃ H H OH SS B838 CH ₃ H CH ₃ H OH SS B839 CH ₃ CH ₂ H CH ₃ H OH SS B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH SS B841 (CH ₃) ₂ CH H CH ₃ H OH SS B841 (CH ₃) ₂ CH H CH ₃ H OH SS B842 (CH ₃) ₃ C H CH ₃ H OH SS B844 CH ₃ SO H CH ₃ H OH SS B844 CH ₃ SO H CH ₃ H OH SS B845 CH ₃ SO ₂ H CH ₃ H OH SS B846 Ph	B827	CH ₃ CH ₂ OC(O)	CH ₃	Н	Н	ОН	SO ₂
B830	B828	CH ₂ =CHCH ₂	CH ₃	H	Н	ОН	SO ₂
B831 (CH ₃) ₂ NSO ₂ CH ₃ H H OH S B832 (CH ₃) ₂ N CH ₃ H H OH S B833 PhO CH ₃ H H OH S B834 PhS CH ₃ H H OH S B835 PhSO CH ₃ H H OH S B836 PhSO ₂ CH ₃ H H OH S B837 CN CH ₃ H H OH S B838 CH ₃ H CH ₃ H OH S B839 CH ₃ CH ₂ H CH ₃ H OH S B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH S B841 (CH ₃) ₂ CH H CH ₃ H OH S B842 (CH ₃) ₃ C H CH ₃ H OH S B844	B829	HCCCH₂	CH ₃	Н	Н	ОН	SO ₂
B832 (CH ₃) ₂ N CH ₃ H H OH S B833 PhO CH ₃ H H OH S B834 PhS CH ₃ H H OH S B835 PhSO CH ₃ H H OH S B836 PhSO ₂ CH ₃ H H OH S B837 CN CH ₃ H H OH S B838 CH ₃ H CH ₃ H OH S B839 CH ₃ CH ₂ H CH ₃ H OH S B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH S B841 (CH ₃) ₂ CH H CH ₃ H OH S B842 (CH ₃) ₃ C H CH ₃ H OH S B843 CH ₃ SO H CH ₃ H OH S B845 CH	B830	CF₃	CH ₃	Н	Н	ОН	SO ₂
B833 PhO CH ₃ H H OH S B834 PhS CH ₃ H H OH S B835 PhSO CH ₃ H H OH S B836 PhSO ₂ CH ₃ H H OH S B837 CN CH ₃ H H OH S B838 CH ₃ H CH ₃ H OH S B839 CH ₃ CH ₂ H CH ₃ H OH S B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH S B841 (CH ₃) ₂ CH H CH ₃ H OH S B842 (CH ₃) ₃ C H CH ₃ H OH S B843 CH ₃ SO H CH ₃ H OH S B844 CH ₃ SO ₂ H CH ₃ H OH S B846 Ph </td <td>B831</td> <td>(CH₃)₂NSO₂</td> <td>CH₃</td> <td>Н</td> <td>Н</td> <td>ОН</td> <td>SO₂</td>	B831	(CH ₃) ₂ NSO ₂	CH ₃	Н	Н	ОН	SO ₂
B834 PhS CH ₃ H H OH S B835 PhSO CH ₃ H H OH S B836 PhSO ₂ CH ₃ H H OH S B837 CN CH ₃ H H OH S B838 CH ₃ H CH ₃ H OH S B839 CH ₃ CH ₂ H CH ₃ H OH S B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH S B841 (CH ₃) ₂ CH H CH ₃ H OH S B842 (CH ₃) ₃ C H CH ₃ H OH S B843 CH ₃ SO H CH ₃ H OH S B844 CH ₃ SO ₂ H CH ₃ H OH S B846 Ph H CH ₃ H OH S	B832	(CH₃)₂N	CH ₃	Н	Н	ОН	SO ₂
B835 PhSO CH ₃ H H OH S B836 PhSO ₂ CH ₃ H H OH S B837 CN CH ₃ H H OH S B838 CH ₃ H CH ₃ H OH S B839 CH ₃ CH ₂ H CH ₃ H OH S B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH S B841 (CH ₃) ₂ CH H CH ₃ H OH S B842 (CH ₃) ₃ C H CH ₃ H OH S B843 CH ₃ SO H CH ₃ H OH S B844 CH ₃ SO H CH ₃ H OH S B845 CH ₃ SO ₂ H CH ₃ H OH S B846 Ph H CH ₃ H OH S	B833	PhO	CH ₃	Н	Н	ОН	SO ₂
B836 PhSO2 CH3 H H OH S B837 CN CH3 H H OH S B838 CH3 H CH3 H OH S B839 CH3CH2 H CH3 H OH S B840 CH3CH2CH2 H CH3 H OH S B841 (CH3)2CH H CH3 H OH S B842 (CH3)3C H CH3 H OH S B843 CH3S H CH3 H OH S B844 CH3SO H CH3 H OH S B845 CH3SO2 H CH3 H OH S B846 Ph H CH3 H OH S	B834	PhS	CH ₃	Н	Н	ОН	SO ₂
B837 CN CH ₃ H H OH S B838 CH ₃ H CH ₃ H OH S B839 CH ₃ CH ₂ H CH ₃ H OH S B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH S B841 (CH ₃) ₂ CH H CH ₃ H OH S B842 (CH ₃) ₃ C H CH ₃ H OH S B843 CH ₃ S H CH ₃ H OH S B844 CH ₃ SO H CH ₃ H OH S B845 CH ₃ SO ₂ H CH ₃ H OH S B846 Ph H CH ₃ H OH S	B835	PhSO	CH ₃	Н	Н	ОН	SO ₂
B838 CH ₃ H CH ₃ H OH S B839 CH ₃ CH ₂ H CH ₃ H OH S B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH S B841 (CH ₃) ₂ CH H CH ₃ H OH S B842 (CH ₃) ₃ C H CH ₃ H OH S B843 CH ₃ S H CH ₃ H OH S B844 CH ₃ SO H CH ₃ H OH S B845 CH ₃ SO ₂ H CH ₃ H OH S B846 Ph H CH ₃ H OH S	B836	PhSO ₂	CH ₃	Н	Н	ОН	SO ₂
B839 CH ₃ CH ₂ H CH ₃ H OH SH B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH SH B841 (CH ₃) ₂ CH H CH ₃ H OH SH B842 (CH ₃) ₃ C H CH ₃ H OH SH B843 CH ₃ S H CH ₃ H OH SH B844 CH ₃ SO H CH ₃ H OH SH B845 CH ₃ SO ₂ H CH ₃ H OH SH B846 Ph H CH ₃ H OH SH	B837	CN	CH₃	Н	Н	ОН	SO ₂
B840 CH ₃ CH ₂ CH ₂ H CH ₃ H OH SH B841 (CH ₃) ₂ CH H CH ₃ H OH SH B842 (CH ₃) ₃ C H CH ₃ H OH SH B843 CH ₃ S H CH ₃ H OH SH B844 CH ₃ SO H CH ₃ H OH SH B845 CH ₃ SO ₂ H CH ₃ H OH SH B846 Ph H CH ₃ H OH SH	B838	CH₃	Н	CH₃	Н	ОН	SO ₂
B841 (CH ₃) ₂ CH H CH ₃ H OH S B842 (CH ₃) ₃ C H CH ₃ H OH S B843 CH ₃ S H CH ₃ H OH S B844 CH ₃ SO H CH ₃ H OH S B845 CH ₃ SO ₂ H CH ₃ H OH S B846 Ph H CH ₃ H OH S	B839	CH₃CH₂	Н	CH_3	Н	ОН	SO ₂
B842 (CH ₃) ₃ C H CH ₃ H OH S B843 CH ₃ S H CH ₃ H OH S B844 CH ₃ SO H CH ₃ H OH S B845 CH ₃ SO ₂ H CH ₃ H OH S B846 Ph H CH ₃ H OH S	B840	CH ₃ CH ₂ CH ₂	Н	CH ₃	Н	ОН	SO ₂
B843 CH ₃ S H CH ₃ H OH S B844 CH ₃ SO H CH ₃ H OH S B845 CH ₃ SO ₂ H CH ₃ H OH S B846 Ph H CH ₃ H OH S	B841	(CH₃)₂CH	Н	CH ₃	Н	ОН	SO ₂
B844 CH ₃ SO H CH ₃ H OH S B845 CH ₃ SO ₂ H CH ₃ H OH S B846 Ph H CH ₃ H OH S	B842	$(CH_3)_3C$	Н	CH ₃	Н	ОН	SO ₂
B845 CH ₃ SO ₂ H CH ₃ H OH S B846 Ph H CH ₃ H OH S	B843	CH₃S	Н	CH ₃	Н	ОН	SO ₂
B846 Ph H CH ₃ H OH S	B844	CH₃SO	Н	CH ₃	Н	ОН	SO ₂
	B845	CH₃SO₂	Н	CH ₃	Н	ОН	SO ₂
B847 CH ₃ O H CH ₃ H OH S	B846	Ph	Н	CH₃	Н	ОН	SO ₂
•	B847	CH₃O	Н	CH₃	Н	ОН	SO ₂

Radical	R_6	R_7	R_8	R ₉	R ₁₀	W
B848	CH₃OC(O)	Н	СН₃	Н	ОН	SO ₂
B849	CH ₃ CH ₂ OC(O)	Н	СН₃	Н	ОН	SO ₂
B850	CH ₂ =CHCH ₂	Н	CH ₃	Н	ОН	SO ₂
B851	HCCCH₂	Н	СН₃	Н	ОН	SO ₂
B852	CF ₃	Н	СН₃	Н	ОН	SO ₂
B853	$(CH_3)_2NSO_2$	Н	СН₃	Н	ОН	SO ₂
B854	$(CH_3)_2N$	Н	СН₃	Н	ОН	SO ₂
B855	PhO	Н	СН₃	Н	ОН	SO ₂
B856	PhS	Н	СНз	Н	ОН	SO ₂
B857	PhSO	Н	CH₃	Н	ОН	SO ₂
B858	PhSO ₂	Н	CH ₃	Н	ОН	SO ₂
B859	CN	Н	СН₃	Н	ОН	SO ₂
B860	CH₃	CH₃	СН₃	Н	ОН	SO ₂
B861	CH₃CH₂	CH₃	CH ₃	Н	ОН	SO ₂
B862	CH ₃ CH ₂ CH ₂	CH ₃	CH ₃	Н	ОН	SO ₂
B863	(CH ₃) ₂ CH	CH ₃	СН3	Н	ОН	SO ₂
B864	(CH ₃) ₃ C	CH ₃	CH₃	Н	ОН	SO ₂
B865	CH₃S	CH ₃	CH ₃	Н	ОН	SO ₂
B866	CH₃SO	CH ₃	CH ₃	Н	ОН	SO ₂
B867	CH₃SO₂	CH ₃	CH_3	Н	ОН	SO ₂
B868	Ph	CH ₃	CH ₃	Н	ОН	SO ₂
B869	CH₃O	CH₃	CH ₃	Н	ОН	SO ₂
B870	CH₃OC(O)	CH₃	CH₃	Н	ОН	SO ₂
B871	CH₃CH₂OC(O)	CH₃	CH₃	Н	ОН	SO ₂
B872	CH ₂ =CHCH ₂	CH ₃	CH₃	Н	ОН	SO ₂
B873	HCCCH₂	CH₃	CH ₃	Н	ОН	SO ₂
B874	CF ₃	CH₃	CH₃	Н	ОН	SO ₂
B875	$(CH_3)_2NSO_2$	CH₃	CH₃	Н	ОН	SO ₂
B876	$(CH_3)_2N$	CH₃	CH ₃	Н	ОН	SO ₂
B877	PhO	CH ₃	CH ₃	Н	ОН	SO ₂
B878	PhS	CH ₃	CH ₃	Н	ОН	SO ₂
B879	PhSO	CH ₃	CH ₃	Н	ОН	SO ₂
B880	PhSO ₂	CH ₃	CH ₃	Н	ОН	SO ₂

Radical	R_6	R ₇	R_8	R_9	R ₁₀	W
B881	CN	CH₃	СН3	Н	ОН	SO ₂
B882	CH₃	CH₃	СН3	CH ₃	ОН	SO ₂
B883	CH₃CH₂	CH₃	СНз	CH ₃	ОН	SO ₂
B884	CH ₃ CH ₂ CH ₂	CH₃	CH₃	CH ₃	ОН	SO ₂
B885	(CH ₃) ₂ CH	CH ₃	CH ₃	CH ₃	ОН	SO ₂
B886	$(CH_3)_3C$	CH ₃	CH ₃	CH ₃	ОН	SO ₂
B887	CH₃S	CH ₃	СН3	CH ₃	ОН	SO ₂
B888	CH₃SO	CH₃	СН₃	CH ₃	ОН	SO ₂
B889	CH ₃ SO ₂	CH ₃	СН₃	CH₃	ОН	SO ₂
B890	Ph	CH₃	СН3	CH ₃	ОН	SO ₂
B891	CH₃O	CH ₃	CH ₃	СН3	ОН	SO ₂
B892	CH₃OC(O)	CH ₃	CH ₃	СН₃	ОН	SO ₂
B893	CH ₃ CH ₂ OC(O)	CH₃	СН3	СН3	ОН	SO ₂
B894	CH ₂ =CHCH ₂	CH ₃	СН3	СН3	ОН	SO_2
B895	HCCCH ₂	CH ₃	CH ₃	CH ₃	ОН	SO ₂
B896	CF ₃	CH ₃	СНз	СН3	ОН	SO ₂
B897	$(CH_3)_2NSO_2$	CH ₃	СН3	CH ₃	ОН	SO ₂
B898	$(CH_3)_2N$	CH ₃	CH ₃	CH ₃	ОН	SO ₂
B899	PhO	CH ₃	СН₃	CH ₃	ОН	SO ₂
B900	PhS	CH₃	СН₃	CH ₃	ОН	SO ₂
B901	PhSO	CH₃	СНз	CH ₃	ОН	SO ₂
B902	PhSO ₂	CH ₃	СНз	CH ₃	ОН	SO ₂
B903	CN	CH ₃	СН3	CH ₃	ОН	SO ₂
B904	CH ₃ CH ₂	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B905	CH ₃ CH ₂ CH ₂	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B906	(CH ₃) ₂ CH	CH₃CH₂	Н	Н	ОН	SO ₂
B907	(CH₃)₃C	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B908	CH₃S	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B909	CH₃SO	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B910	CH₃SO₂	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B911	Ph	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B912	CH₃O	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B913	CH ₃ OC(O)	CH ₃ CH ₂	Н	Н	ОН	SO ₂

Radical	R_{6}	R ₇	R_8	R_9	R ₁₀	W
B914	CH ₃ CH ₂ OC(O)	CH₃CH₂	Н	Н	ОН	SO_2
B915	CH ₂ =CHCH ₂	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B916	HCCCH₂	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B917	CF ₃	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B918	$(CH_3)_2NSO_2$	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B919	$(CH_3)_2N$	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B920	PhO	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B921	PhS	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B922	PhSO	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B923	PhSO ₂	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B924	CN	CH ₃ CH ₂	Н	Н	ОН	SO ₂
B925	Н	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B926	CH₃	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B927	CH₃CH₂	Н	H	Н	ОН	CHC(O)OCH₂CH₃
B928	CH₃CH₂CH₂	Н	Н	Н	ОН	CHC(O)OCH₂CH₃
B929	(CH ₃) ₂ CH	Н	Н	Н	ОН	CHC(O)OCH₂CH₃
B930	(CH₃)₃C	Н	Н	Н	ОН	CHC(O)OCH₂CH₃
B931	CH₃S	Н	Н	Н	ОН	CHC(O)OCH₂CH₃
B932	CH₃SO	Н	Н	Н	ОН	CHC(O)OCH₂CH₃
B933	CH₃SO₂	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B934	Ph	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B935	CH₃O	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B936	CH₃OC(O)	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B937	CH ₃ CH ₂ OC(O)	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B938	CH ₂ =CHCH ₂	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B939	HCCCH₂	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B940	CF₃	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B941	$(CH_3)_2NSO_2$	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B942	$(CH_3)_2N$	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B943	PhO	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B944	PhS	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B945	PhSO	Н	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B946	PhSO ₂	Н	Н	Н	ОН	CHC(O)OCH₂CH₃

Radical	R_6	R ₇	R_8	R_9	R ₁₀	W
B947	CN	Н	Н	Н	ОН	CHC(O)OCH₂CH₃
B948	CH₃	CH ₃	Н	Н	ОН	CHC(O)OCH₂CH₃
B949	CH₃CH₂	СН₃	Н	Н	ОН	CHC(O)OCH₂CH₃
B950	CH ₃ CH ₂ CH ₂	CH ₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B951	(CH ₃) ₂ CH	CH₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B952	(CH ₃) ₃ C	CH ₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B953	CH₃S	CH₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B954	CH₃SO	CH ₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B955	CH ₃ SO ₂	CH ₃	Н	Н	ОН	CHC(O)OCH2CH3
B956	Ph	CH ₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B957	CH₃O	CH ₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B958	CH₃OC(O)	CH ₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B959	CH ₃ CH ₂ OC(O)	CH ₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B960	CH ₂ =CHCH ₂	CH₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B961	HCCCH₂	CH ₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B962	CF ₃	CH ₃	Н	Н	ОН	CHC(O)OCH₂CH₃
B963	$(CH_3)_2NSO_2$	CH₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B964	$(CH_3)_2N$	CH_3	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B965	PhO	CH₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B966	PhS	CH₃	Н	Н	ОН	CHC(O)OCH₂CH₃
B967	PhSO	CH ₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B968	PhSO ₂	CH ₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B969	CN	CH₃	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B970	CH ₃	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B971	CH₃CH₂	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B972	CH₃CH₂CH₂	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B973	(CH ₃) ₂ CH	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B974	$(CH_3)_3C$	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B975	CH₃S	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B976	CH₃SO	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B977	CH₃SO₂	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B978	Ph	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B979	CH₃O	Н	CH₃	Н	ОН	CHC(O)OCH ₂ CH ₃

Radical	R_6	R ₇	R_8	R_9	R ₁₀	W
B980	CH₃OC(O)	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B981	CH ₃ CH ₂ OC(O)	Н	CH ₃	Н	ОН	CHC(O)OCH₂CH₃
B982	CH ₂ =CHCH ₂	Н	CH₃	Н	ОН	CHC(O)OCH₂CH₃
B983	HCCCH₂	Н	CH ₃	Н	ОН	CHC(O)OCH₂CH₃
B984	CF ₃	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B985	$(CH_3)_2NSO_2$	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B986	$(CH_3)_2N$	Н	CH_3	Н	ОН	CHC(O)OCH ₂ CH ₃
B987	PhO	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B988	PhS	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B989	PhSO	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B990	PhSO ₂	Н	СН3	Н	ОН	CHC(O)OCH ₂ CH ₃
B991	CN	Н	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B992	CH ₃	CH ₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B993	CH₃CH₂	CH ₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B994	CH ₃ CH ₂ CH ₂	CH ₃	CH₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B995	(CH ₃) ₂ CH	CH₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B996	$(CH_3)_3C$	CH ₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B997	CH₃S	CH ₃	CH_3	Н	ОН	CHC(O)OCH ₂ CH ₃
B998	CH₃SO	CH ₃	CH ₃	Н	ОН	CHC(O)OCH₂CH₃
B999	CH ₃ SO ₂	CH ₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1000	Ph	CH ₃	CH₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1001	CH₃O	CH ₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1002	CH ₃ OC(O)	CH₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1003	CH ₃ CH ₂ OC(O)	CH ₃	CH₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1004	CH ₂ =CHCH ₂	CH ₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1005	HCCCH ₂	CH ₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1006	CF ₃	CH ₃	CH₃	Н	ОН	CHC(O)OCH₂CH₃
B1007	$(CH_3)_2NSO_2$	CH ₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1008	$(CH_3)_2N$	CH ₃	CH ₃	Н	ОН	CHC(O)OCH₂CH₃
B1009	PhO	CH ₃	CH ₃	Н	ОН	CHC(O)OCH₂CH₃
B1010	PhS	CH₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1011	PhSO	CH₃	CH ₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1012	PhSO ₂	CH ₃	CH₃	Н	ОН	CHC(O)OCH₂CH₃

Radical	R_{6}	R ₇	R_8	R_9	R ₁₀	W
B1013	CN	CH₃	CH₃	Н	ОН	CHC(O)OCH ₂ CH ₃
B1014	CH₃	CH₃	CH₃	СН₃	ОН	CHC(O)OCH ₂ CH ₃
B1015	CH ₃ CH ₂	CH₃	СН₃	СН₃	ОН	CHC(O)OCH ₂ CH ₃
B1016	CH₃CH₂CH₂	CH₃	CH₃	СН₃	ОН	CHC(O)OCH ₂ CH ₃
B1017	(CH₃)₂CH	CH₃	СН₃	CH₃	ОН	CHC(O)OCH ₂ CH ₃
B1018	(CH₃)₃C	CH ₃	CH ₃	CH ₃	ОН	CHC(O)OCH₂CH₃
B1019	CH₃S	CH₃	CH ₃	CH ₃	ОН	CHC(O)OCH₂CH₃
B1020	CH₃SO	CH₃	СН₃	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1021	CH ₃ SO ₂	CH₃	СН3	СН3	ОН	CHC(O)OCH ₂ CH ₃
B1022	Ph	CH ₃	СН3	СН₃	ОН	CHC(O)OCH ₂ CH ₃
B1023	CH₃O	CH₃	CH ₃	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1024	CH₃OC(O)	CH₃	СН3	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1025	CH₃CH₂OC(O)	CH ₃	СН3	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1026	CH ₂ =CHCH ₂	CH ₃	CH ₃	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1027	HCCCH₂	CH ₃	CH ₃	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1028	CF ₃	CH ₃	CH ₃	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1029	$(CH_3)_2NSO_2$	CH ₃	СН3	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1030	(CH₃)₂N	CH ₃	CH ₃	CH_3	ОН	CHC(O)OCH ₂ CH ₃
B1031	PhO	CH ₃	CH ₃	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1032	PhS	CH ₃	CH ₃	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1033	PhSO	CH ₃	CH ₃	CH ₃	ОН	CHC(O)OCH ₂ CH ₃
B1034	PhSO ₂	CH ₃	СH ₃	CH ₃	ОН	CHC(O)OCH₂CH₃
B1035	CN	CH ₃	СНз	CH ₃	ОН	CHC(O)OCH₂CH₃
B1036	CH₃CH₂	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1037	CH₃CH₂CH₂	CH₃CH₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1038	(CH ₃) ₂ CH	CH₃CH₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1039	(CH₃)₃C	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1040	CH₃S	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1041	CH₃SO	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1042	CH₃SO₂	CH₃CH₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1043	Ph	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1044	CH₃O	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1045	CH₃OC(O)	CH₃CH₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B1046	CH₃CH₂OC(O)	CH₃CH₂	Н	Н	ОН	CHC(O)OCH₂CH₃
B1047	CH ₂ =CHCH ₂	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH₂CH₃
B1048	HCCCH ₂	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH₂CH₃
B1049	CF ₃	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1050	$(CH_3)_2NSO_2$	CH₃CH₂	Н	Н	ОН	CHC(O)OCH₂CH₃
B1051	$(CH_3)_2N$	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1052	PhO	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH₂CH₃
B1053	PhS	CH₃CH₂	Н	Н	ОН	CHC(O)OCH₂CH₃
B1054	PhSO	CH₃CH₂	Н	Н	ОН	CHC(O)OCH₂CH₃
B1055	PhSO ₂	CH₃CH₂	Н	Н	ОН	CHC(O)OCH ₂ CH ₃
B1056	CN	CH ₃ CH ₂	Н	Н	ОН	CHC(O)OCH₂CH₃
B1057	CH₃OC(O)	Н	Н	Н	ОН	CHPh
B1058	Н	Н	Н	Н	ОН	CHPh
B1059	H	Н	Н	Н	ОН	CH(CH₂CH₃)
B1060	Н	Н	Н	Н	ОН	CH(CH ₂ CH ₂ CH ₃)
B1061	Н	Н	Н	Н	ОН	CH(CH(CH ₃) ₂)
B1062	Н	Н	Н	Н	ОН	$CH(C(CH_3)_3)$
B1063	Н	Н	Н	Н	ОН	$C(CH_3)_2$
B1064	H a	Н	Н	Н	ОН	CH(CF₃)
B1065	CH₃OC(O)	Н	Н	Н	ОН	$C(CH_3)(CF_3)$
B1066	Н	Н	Н	Н	ОН	$C(CH_3)(CF_3)$
B1067	CH ₃ OC(O)	CH₃O	Н	Н	ОН	CH ₂
B1068	Н	CH ₃ O	Н	Н	ОН	CH ₂
B1069	CH₃O	CH ₃ OC(O)	Н	СH ₃	ОН	CH ₂
B1070	CH₃O	Н	CH ₃	Н	ОН	CH₂
B1071	CI	Н	Н	Н	ОН	CH ₂
B1072	F	Н	Н	Н	ОН	CH ₂
B1073	Н	Н	Н	Н	ОН	CH(OCH ₃) ₂
B1074	Н	H	Н	Н	ОН	CH ₂ OSO ₂ CH ₃
B1075	CH₃	CH ₃	CH ₃	СН3	OH	S(O)
B1076	CICH ₂ CH ₂	Н	Н	Н	ОН	CH ₂
B1077	$HO(CH_2)_2$	Н	Н	Н	ОН	CH ₂
B1078	MsO(CH ₂) ₂	Н	Н	Н	ОН	CH₂

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B1079	HOCH(CH ₃)CH ₂	Н	Н	Н	ОН	CH ₂
B1080	MsOCH(CH ₃)CH ₂	Н	Н	Н	ОН	CH₂
B1081	(CH ₃) ₂ CH	Н	СН₃	СН3	ОН	CH ₂
B1082	HCCCH₂	Н	СНз	CH ₃	ОН	CH₂
B1083	H ₂ C=CCH ₂	Н	СН₃	CH ₃	ОН	CH₂
B1084	$H_2C=C(CH_3)$	Н	Н	Н	ОН	CHCH₃
B1085	Н	Н	Н	Н	ОН	CHCONHCH₂Ph
B1086	Н	Н	Н	Н	ОН	$() \xrightarrow{H} \overset{H}{\underset{O}{\bigvee}} SCH_{3}$
B1087	CH ₃ OC(O)	CH ₃	Н	Н	ОН	C(CH ₃) ₂
B1088	Н	Н	Н	Н	ОН	CH₃
						() CH ₃
B1089	CH₃CH₂	Н	CH₃	CH ₃	ОН	CH ₂
B1090	CH₃OC(O)	Н	Н	Н	ОН	CF ₃ CH ₂ CH ₂
B1091	CH₃CH₂S	CH ₃ CH ₂	CH ₃	Н	ОН	CH ₂
B1092	CH₃S	Ph	CH ₃	Н	ОН	CH ₂
B1093	CH₃CH₂	CH ₃ CH ₂	CH_3	Н	ОН	CH ₂
B1094	CH₃OC(O)	Н	Н	Η.	ОН	C(CH ₃) ₂
B1095	CH₃	Н	Н	Н	ОН	$C(CH_3)_2$
B1096	Н	Н	Н	Н	ОН	NCOCH ₂ SCH ₃
B1097	()	Н	Н	Н	ОН	CH ₂
B1098	1,1-dimethylvinyl	Н	Н	Н	ОН	CH ₂
B1099	~s^()	Н	Н	Н	ОН	CH ₂
B1100	Н	Н	Н	Н	-ONH+(CH ₂ CH ₃) ₃	CH ₂
B1101	Н	Н	Н	Н	-ONH+(CH ₂ CH ₃) ₃	CH(CH₃)
B1102	Н	Н	Н	Н	PhS	CH₂
B1103	Н	Н	Н	Н	PhSO	CH ₂
B1104	Н	Н	Н	Н	PhSO ₂	CH₂
B1105	CH ₃	CH ₃	CH₃	СН3	CI	C=O
B1106	Н	Н	Н	Н	ОН	CHCH ₂ CH(CH ₃) ₂

Radical	R_{6}	R ₇	R_8	R_9	R ₁₀	W
B1107	CH₃	CH ₃	CH₃	СН₃	CH₃C(O)O	C=O
B1108	CH ₃ OC(O)CH ₂	Н	Н	Н	ОН	CH₂
B1109	CH ₃ OC(O)CH ₂	CH ₃	Н	Н	ОН	CH₂
B1110	CH ₃ OC(O)CH ₂	CH ₃	СН₃	Н	ОН	CH ₂
B1111	$CH_3OC(O)CH_2$	CH ₃	СН3	СН ₃	ОН	CH₂
B1112	$CH_3OC(O)CH_2$	Н	СН3	СН₃	ОН	CH₂
B1113	CH ₃ OC(O)CH ₂	Н	Н	Н	ОН	CH(CH₃)
B1114	$CH_3OC(O)CH_2$	CH ₃	Н	Н	ОН	CH(CH ₃)
B1115	CH ₃ OC(O)CH ₂	CH ₃	СНз	Н	ОН	CH(CH₃)
B1116	CH ₃ OC(O)CH ₂	CH ₃	СН3	CH ₃	ОН	CH(CH ₃)
B1117	CH ₃ OC(O)CH ₂	Н	СНз	CH ₃	ОН	CH(CH ₃)
B1118	CH ₃ OC(O)CH ₂	Н	Н	Н	ОН	$C(CH_3)_2$
B1119	CH ₃ OC(O)CH ₂	CH₃	Н	Н	ОН	C(CH ₃) ₂
B1120	CH ₃ OC(O)CH ₂	CH₃	CH ₃	Н	ОН	C(CH ₃) ₂
B1121	CH ₃ OC(O)CH ₂	CH ₃	CH ₃	CH ₃	ОН	$C(CH_3)_2$
B1122	CH ₃ OC(O)CH ₂	Н	CH ₃	CH ₃	ОН	$C(CH_3)_2$
B1123	CH ₃ CH ₂ OC(O)CH ₂	Н	Н	Н	ОН	CH ₂
B1124	CH ₃ CH ₂ OC(O)CH ₂	CH ₃	Н	Н	ОН	CH ₂
B1125	CH ₃ CH ₂ OC(O)CH ₂	CH₃	CH ₃	Н	ОН	CH ₂
B1126	CH ₃ CH ₂ OC(O)CH ₂	CH ₃	CH ₃	CH_3	ОН	CH ₂
B1127	CH ₃ CH ₂ OC(O)CH ₂	Н	CH ₃	CH ₃	ОН	CH ₂
B1128	CH ₃ CH ₂ OC(O)CH ₂	Н	Н	Н	ОН	CH(CH ₃)
B1129	CH ₃ CH ₂ OC(O)CH ₂	CH ₃	Н	Н	ОН	CH(CH ₃)
B1130	CH ₃ CH ₂ OC(O)CH ₂	CH ₃	CH₃	Н	ОН	CH(CH₃)
B1131	CH ₃ CH ₂ OC(O)CH ₂	CH ₃	CH ₃	CH ₃	ОН	CH(CH ₃)
B1132	CH ₃ CH ₂ OC(O)CH ₂	Н	CH ₃	CH ₃	ОН	CH(CH₃)
B1133	CH ₃ CH ₂ OC(O)CH ₂	Н	Н	Н	ОН	$C(CH_3)_2$
B1134	CH ₃ CH ₂ OC(O)CH ₂	CH ₃	Н	Н	ОН	$C(CH_3)_2$
B1135	CH ₃ CH ₂ OC(O)CH ₂	CH ₃	CH₃	Н	ОН	$C(CH_3)_2$
B1136	CH ₃ CH ₂ OC(O)CH ₂	CH₃	CH ₃	CH ₃	ОН	$C(CH_3)_2$
B1137	CH ₃ CH ₂ OC(O)CH ₂	Н	CH ₃	CH ₃	ОН	$C(CH_3)_2$
B1138	CH ₃ CH ₂ O CH ₃	CH₃	Н	Н	ОН	CH ₂

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B1139	CH₃SCH₂	Н	Н	Н	ОН	CH ₂
B1140	CH₃SCH₂	CH ₃	Н	Н	ОН	CH ₂
B1141	CH₃SCH₂	CH₃	СН₃	Н	ОН	CH ₂
B1142	CH₃SCH₂	CH ₃	СН₃	CH ₃	ОН	CH ₂
B1143	CH₃SCH₂	Н	СН3	CH ₃	ОН	CH ₂
B1144	CH₃SOCH₂	Н	Н	Н	ОН	CH ₂
B1145	CH₃SOCH₂	CH₃	Н	Н	ОН	CH ₂
B1146	CH₃SOCH₂	CH₃	CH ₃	Н	ОН	CH ₂
B1147	CH₃SOCH₂	CH ₃	СН3	СН₃	ОН	CH ₂
B1148	CH₃SOCH₂	Н	CH ₃	СН₃	ОН	CH ₂
B1149	CH ₃ SO ₂ CH ₂	Н	Н	Н	ОН	CH ₂
B1150	CH ₃ SO ₂ CH ₂	CH₃	Н	Н	ОН	CH ₂
B1151	CH ₃ SO ₂ CH ₂	CH ₃	CH ₃	Н	ОН	CH ₂
B1152	CH ₃ SO ₂ CH ₂	CH ₃	CH ₃	CH ₃	ОН	CH ₂
B1153	CH ₃ SO ₂ CH ₂	Н	CH₃	CH ₃	ОН	CH ₂
B1154	HOCH ₂	Н	Н	Н	ОН	CH ₂
B1155	HOCH₂	CH ₃	Н	Н	ОН	CH₂
B1156	HOCH ₂	CH ₃	СН3	Н	ОН	CH ₂
B1157	HOCH ₂	CH ₃	CH ₃	CH ₃	ОН	CH ₂
B1158	HOCH₂	Н	CH ₃	CH ₃	ОН	CH ₂
B1159	NCCH₂	Н	Н	Н	ОН	CH ₂
B1160	NCCH₂	CH ₃	Н	Н	ОН	CH ₂
B1161	NCCH ₂	CH ₃	CH ₃	Н	ОН	CH ₂
B1162	NCCH ₂	CH ₃	CH ₃	CH ₃	ОН	CH ₂
B1163	NCCH₂	Н	CH ₃	CH ₃	ОН	CH ₂
B1164	$CH_3C(O)OCH_2$	Н	Н	Н	ОН	CH₂
B1165	$CH_3C(O)OCH_2$	CH ₃	Н	Н	ОН	CH ₂
B1166	$CH_3C(O)OCH_2$	CH ₃	CH₃	Н	ОН	CH₂
B1167	$CH_3C(O)OCH_2$	CH ₃	СН₃	CH ₃	ОН	CH ₂
B1168	CH ₃ C(O)OCH ₂	Н	CH₃	CH ₃	ОН	CH ₂
B1169	CH ₃ OCH ₂	Н	Н	Н	ОН	CH ₂
B1170	CH ₃ OCH ₂	CH ₃	Н	Н	ОН	CH ₂
B1171	CH ₃ OCH ₂	CH ₃	CH₃	Н	ОН	CH ₂

Radical	R_{6}	R_7	R ₈	R_9	R ₁₀	W
B1172	CH₃OCH₂	CH₃	CH₃	СНз	ОН	CH ₂
B1173	CH₃OCH₂	Н	СН₃	СН3	ОН	CH ₂
B1174	PhCH₂	Н	Н	Н	ОН	CH ₂
B1175	PhCH ₂	CH ₃	Н	Н	ОН	CH ₂
B1176	PhCH₂	CH₃	СН₃	Н	ОН	CH ₂
B1177	PhCH₂	CH₃	СН₃	СН₃	ОН	CH ₂
B1178	PhCH₂	Н	СН₃	СН₃	ОН	CH₂
B1179	Н	Н	Н	Н	O-K+	CH₂
B1180	Н	Н	Н	Н	S(CH ₂) ₇ CH ₃	CH₂
B1181	Н	Н	Н	Н	S(CH ₂) ₇ CH ₃	CH₂
B1182	Н	Н	Н	Н	SO(CH ₂) ₇ CH ₃	CH ₂
B1183	Н	Н	Н	Н	SO ₂ (CH ₂) ₇ CH ₃	CH ₂
B1184	Н	Н	Н	Н	NHSO₂CH₃	CH ₂
B1185	н	Н	Н	Н	NH(CO)S(CH ₂) ₇ CH ₃	CH ₂
B1186	Н	Н	Н	Н	CI	CH₂
B1187	Н	Н	Н	Н	NH ₂	CH₂
B1188	Н	Н	Н	Н	$OC(O)C(CH_3)_3$	CH ₂
B1189	н	Н	Н	Н	OC(O)CH₃	CH ₂
B1190	Н	Н	Н	Н	OC(O)Ph	CH ₂
B1191	Н	Н	Н	Н	OC(O)-cyclopropyl	CH ₂
B1192	Н	Н	Н	Н	OC(O)CH₂CH₃	CH ₂
B1193	Н	Н	Н	Н	OC(O)CH=CH ₂	CH₂
B1194	Н	Н	Н	Н	OC(O)CH=CHCH ₃	CH₂
B1195	Н	Н	Н	Н	OC(O)SCH₃	CH ₂
B1196	Н	Н	Н	Н	OC(O)S(CH ₂) ₇ CH ₃	CH ₂
B1197	н	Н	Н	Н	OC(O)OCH ₂ CH ₃	CH ₂
B1198	Н	Н	Н	Н	OC(O)N(CH ₂ CH ₃) ₂	CH ₂
B1199	н	Н	Н	Н	S-(4-Cl-phenyl)	CH₂
B1200	H	Н	Н	Н	SO-(4-Cl-phenyl)	CH₂
B1201	Н	Н	Н	Н	SO ₂ -(4-Cl-phenyl)	CH₂
B1202	Н	Н	Н	Н	S-(4-CF ₃ -phenyl)	CH ₂
B1203	Н	Н	Н	Н	SO-(4-CF ₃ -phenyl)	CH₂
B1204	н	Н	Н	Н	SO ₂ -(4-CF ₃ -phenyl)	CH ₂

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B1205	н	Н	Н	Н	S-(4-NO ₂ -phenyl)	CH ₂
B1206	Н	Н	Н	Н	SO-(4-NO ₂ -phenyl)	CH ₂
B1207	Н	Н	Н	Н	SO ₂ -(4-NO ₂ -phenyl)	CH ₂
B1208	Н	Н	Н	Н	s~C°	CH ₂
B1209	Н	н	Н	Н	s H	CH ₂
B1210	н	Н	Н.	Н	s	CH₂
B1211	Н	Н	Н	Н	S SCH ₃	CH₂
B1212	Н	Н	Н	Н	s N O	CH ₂
B1179	CH ₃	CH ₃	Н	Н	O-K+	CH ₂
B1180	CH ₃	CH₃	Н	Н	S(CH ₂) ₇ CH ₃	CH₂
B1181	CH ₃	CH₃	Н	Н	S(CH ₂) ₇ CH ₃	CH ₂
B1182	CH₃	CH₃	Н	Н	SO(CH ₂) ₇ CH ₃	CH ₂
B1183	CH₃	CH ₃	Н	Н	SO ₂ (CH ₂) ₇ CH ₃	CH ₂
B1184	CH₃	CH ₃	Н	Н	NHSO₂CH₃	CH ₂
B1185	CH₃	CH ₃	Н	Н	NH(CO)S(CH ₂) ₇ CH ₃	CH ₂
B1186	CH₃	CH₃	Н	Н	CI	CH ₂
B1187	CH₃	CH₃	Н	Н	NH_2	CH ₂
B1188	CH₃	CH₃	Н	Н	$OC(O)C(CH_3)_3$	CH ₂
B1189	CH₃	CH₃	H	Н	OC(O)CH₃	CH ₂
B1190	CH₃	CH₃	Н	Н	OC(O)Ph	CH ₂
B1191	CH₃	CH ₃	Н	Н	OC(O)-cyclopropyl	CH ₂
B1192	CH₃	CH ₃	Н	. Н	OC(O)CH ₂ CH ₃	CH ₂
B1193	CH₃	CH₃	Н	Н	OC(O)CH=CH ₂	CH ₂
B1194	CH₃	CH ₃	Н	Н	OC(O)CH=CHCH ₃	CH ₂
B1195	CH₃	CH₃	Н	Н	OC(O)SCH ₃	CH ₂
B1196	CH₃	CH₃	Н	Н	$OC(O)S(CH_2)_7CH_3$	CH ₂
B1197	CH₃	СН₃	Н	Н	OC(O)OCH ₂ CH ₃	CH ₂
B1198	CH ₃	CH ₃	Н	Н	$OC(O)N(CH_2CH_3)_2$	CH ₂
B1199	CH₃	CH₃	Н	Н	S-(4-Cl-phenyl)	CH ₂
B1200	CH₃	CH₃	Н	Н	SO-(4-Cl-phenyl)	CH ₂

Radical	R_6	R_7	R_8	R_9	R ₁₀	W
B1201	CH₃	CH ₃	Н	Н	SO ₂ -(4-Cl-phenyl)	CH ₂
B1202	CH₃	CH ₃	Н	Н	S-(4-CF ₃ -phenyl)	CH ₂
B1203	CH₃	CH ₃	Н	Н	SO-(4-CF ₃ -phenyl)	CH ₂
B1204	CH₃	CH ₃	Н	Н	SO ₂ -(4-CF ₃ -phenyl)	CH ₂
B1205	CH₃	CH ₃	Н	Н	S-(4-NO ₂ -phenyl)	CH ₂
B1206	CH₃	СН₃	Н	Н	SO-(4-NO ₂ -phenyl)	CH₂
B1207	CH₃	CH ₃	Н	Н	SO ₂ -(4-NO ₂ -phenyl)	CH₂
B1208	CH₃	CH₃	Н	Н	s C	CH ₂
B1209	CH ₃	CH ₃	Н	Н	s Th	CH₂
B1210	CH₃	CH ₃	Н	Н	s	CH ₂
B1211	CH₃	CH ₃	Н	Н	S S SCH,	CH ₂
B1212	CH₃	CH₃	Н	Н	s	CH ₂
D4040		1 1			0.	
B1213	Н	Н	Н	Н	ОН	-CH ₂ CH ₂ -
B1214	CH₃	Н	Н	Н	ОН	-CH ₂ CH ₂ -
B1215	CH₃	CH₃	Н	Н	ОН	-CH ₂ CH ₂ -
B1216	CH ₃	CH ₃	СН3	Н	ОН	-CH ₂ CH ₂ -
B1217	CH ₃	CH₃	CH₃	CH ₃	ОН	-CH ₂ CH ₂ -

In Table 3 which follows, Q is Q2

and Q_2 the radicals C which follow:

Table 3: Radicals C:

 $Radical \qquad R_6 \qquad \qquad R_7 \qquad R_{16} \quad R_{10} \quad p \qquad W$

Radical	R_6	R_7	R ₁₆	R ₁₀	р	W
C1	Н	Н	Н	ОН	1	CH ₂
C2	CH₃	Н	Н	ОН	1	CH ₂
СЗ	CH₃CH₂	Н	H	ОН	1	CH ₂
C4	CH ₃ CH ₂ CH ₂	н	Н	ОН	1	CH ₂
C5	(CH ₃)₂CH	Н	Н	ОН	1	CH ₂
C6	$(CH_3)_3C$	Н	Н	ОН	1	CH ₂
C7	CH₃S	Н	Н	ОН	1	CH ₂
C8	CH₃SO	Н	Н	ОН	1	CH ₂
C9	CH ₃ SO ₂	Н	Н	ОН	1	CH ₂
C10	Ph	Н	Н	ОН	1	CH ₂
C11	CH₃O	Н	Н	ОН	1	CH ₂
C12	CH ₃ OC(O)	Н	Н	ОН	1	CH ₂
C13	CH ₃ CH ₂ OC(O)	Н	Н	ОН	1	CH₂
C14	CH ₂ =CHCH ₂	Н	Н	ОН	1	CH ₂
C15	HCCCH ₂	Н	H	ОН	1	CH ₂
C16	CF ₃	Н	Н	ОН	1	CH ₂
C17	$(CH_3)_2NSO_2$	Н	Н	ОН	1	CH ₂
C18	(CH ₃) ₂ N	Н	Н	ОН	1	CH ₂
C19	PhO	Н	Н	ОН	1	CH ₂
C20	PhS	H	Н	ОН	1	CH ₂
C21	PhSO	Н	Н	ОН	1	CH ₂
C22	PhSO ₂	Н	Н	ОН	1	CH ₂
C23	CN	Н	Н	ОН	1	CH ₂
C24	CH₃	CH ₃	Н	ОН	1	CH ₂
C25	CH₃CH₂	CH ₃	Н	ОН	1	CH ₂
C26	CH₃CH₂CH₂	CH ₃	Н	ОН	1	CH ₂
C27	(CH ₃) ₂ CH	CH ₃	Н	ОН	1	CH ₂
C28	$(CH_3)_3C$	CH ₃	Н	ОН	1	CH ₂
C29	CH₃S	CH ₃	Н	ОН	1	CH ₂
C30	CH₃SO	CH ₃	Н	ОН	1	CH ₂
C31	CH ₃ SO ₂	CH₃	Н	ОН	1	CH ₂
C32	Ph	CH ₃	Н	ОН	1	CH ₂

Radical	R_6	R_7	R ₁₆	R ₁₀	р	W
C33	CH₃O	CH₃	Н	ОН	1	CH ₂
C34	CH₃OC(O)	CH₃	Н	ОН	1	CH ₂
C35	CH ₃ CH ₂ OC(O)	CH ₃	Н	ОН	1	CH ₂
C36	CH ₂ =CHCH ₂	CH₃	Н	ОН	1	CH ₂
C37	HCCCH₂	CH ₃	Н	ОН	1	CH ₂
C38	CF ₃	CH ₃	Н	ОН	1	CH ₂
C39	$(CH_3)_2NSO_2$	CH ₃	Н	ОН	1	CH ₂
C40	$(CH_3)_2N$	CH ₃	Н	ОН	1	CH ₂
C41	PhO	CH ₃	Н	ОН	1	CH ₂
C42	PhS	CH₃	Н	ОН	1	CH ₂
C43	PhSO	CH ₃	Н	ОН	1	CH ₂
C44	PhSO₂	CH ₃	Н	ОН	1	CH ₂
C45	CN	CH ₃	Н	ОН	1	CH ₂
C46	, Н	Н	Н	ОН	4	CH ₂
C47	CH₃	Н	Н	ОН	4	CH ₂
C48	CH₃CH₂	Н	Н	ОН	4	CH ₂
C49	CH ₃ CH ₂ CH ₂	Н	Н	ОН	4	CH ₂
C50	(CH ₃) ₂ CH	Н	Н	ОН	4	CH ₂
C51	$(CH_3)_3C$	Н	Н	ОН	4	CH ₂
C52	CH₃S	Н	Н	ОН	4	CH ₂
C53	CH₃SO	Н	Н	ОН	4	CH ₂
C54	CH₃SO₂	Н	Н	ОН	4	CH ₂
C55	Ph	Н	Н	ОН	4	CH ₂
C56	CH₃O	Н	Н	ОН	4	CH ₂
C57	CH₃OC(O)	Н	Н	ОН	4	CH ₂
C58	CH ₃ CH ₂ OC(O)	Н	Н	ОН	4	CH ₂
C59	CH ₂ =CHCH ₂	Н	Н	ОН	4	CH ₂
C60	HCCCH ₂	Н	Н	ОН	4	CH ₂
C61	CF ₃	Н	Н	ОН	4	CH ₂
C62	$(CH_3)_2NSO_2$	Н	Н	ОН	4	CH ₂
C63	(CH ₃) ₂ N	Н	Н	ОН	4	CH ₂
C64	PhO	Н	Н	ОН	4	CH ₂
C65	PhS	Н	Н	ОН	4	CH ₂

Radical	R_6	R_7	R ₁₆	R ₁₀	р	W
C66	PhSO	Н	Н	ОН	4	CH ₂
C67	PhSO ₂	Н	Н	ОН	4	CH ₂
C68	CN	Н	Н	ОН	4	CH ₂
C69	CH₃	СН₃	Н	ОН	4	CH ₂
C70	CH₃CH₂	СН₃	Н	ОН	4	CH ₂
C71	CH₃CH₂CH₂	CH₃	Н	ОН	4	CH ₂
C72	(CH ₃) ₂ CH	СН₃	Н	ОН	4	CH ₂
C73	(CH ₃) ₃ C	СН₃	Н	ОН	4	CH ₂
C74	CH₃S	CH ₃	Н	ОН	4	CH ₂
C75	CH₃SO	СН₃	Н	ОН	4	CH ₂
C76	CH ₃ SO ₂	СН3	Н	ОН	4	CH ₂
C77	Ph	CH₃	Н	ОН	4	CH ₂
C78	CH₃O	CH_3	Н	ОН	4	CH ₂
C79	CH₃OC(O)	СНз	Н	ОН	4	CH ₂
C80	CH ₃ CH ₂ OC(O)	CH ₃	Н	ОН	4	CH ₂
C81	CH ₂ =CHCH ₂	CH₃	Н	ОН	4	CH ₂
C82	HCCCH₂	СН3	Н	ОН	4	CH ₂
C83	CF ₃	CH ₃	Н	ОН	4	CH ₂
C84	$(CH_3)_2NSO_2$	СН3	Н	ОН	4	CH ₂
C85	$(CH_3)_2N$	CH ₃	Н	ОН	4	CH ₂
C86	PhO	CH ₃	Н	ОН	4	CH ₂
C87	PhS	CH ₃	Н	ОН	4	CH ₂
C88	PhSO	CH ₃	Н	ОН	4	CH ₂
C89	PhSO ₂	CH ₃	Н	ОН	4	CH ₂
C90	CN	CH ₃	Н	ОН	4	CH ₂
C91	Н	Н	Н	ОН	3	CH ₂
C92	CH₃	Н	Н	ОН	3	CH ₂
C93	CH ₃ CH ₂	Н	Н	ОН	3	CH ₂
C94	CH ₃ CH ₂ CH ₂	н	Н	ОН	3	CH ₂
C95	(CH ₃) ₂ CH	Н	Н	ОН	3	CH ₂
C96	(CH ₃) ₃ C	Н	Н	ОН	3	CH ₂
C97	CH₃S	Н	Н	ОН	3	CH ₂
C98	CH₃SO	н	н	ОН	3	CH ₂

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Radical	R ₆	R ₇	R ₁₆	R ₁₀	р	W
C99	CH₃SO₂	Н	Н	ОН	3	CH ₂
C100	Ph	Н	Н	ОН	3	CH ₂
C101	CH₃O	Н	Н	ОН	3	CH ₂
C102	CH₃OC(O)	Н	H	ОН	3	CH₂
C103	CH ₃ CH ₂ OC(O)	Н	Н	ОН	3	CH ₂
C104	CH ₂ =CHCH ₂	Н	Н	ОН	3	CH ₂
C105	HCCCH₂	Н	Н	ОН	3	CH ₂
C106	CF₃	Н	Н	ОН	3	CH ₂
C107	$(CH_3)_2NSO_2$	Н	Н	ОН	3	CH ₂
C108	$(CH_3)_2N$	Н	Н	ОН	3	CH ₂
C109	PhO	Н	Н	ОН	3	CH ₂
C110	PhS	Н	Н	ОН	3	CH ₂
C111	PhSO	H	Н	ОН	3	CH₂
C112	PhSO ₂	Н	Н	ОН	3	CH ₂
C113	CN	Н	Н	ОН	3	CH ₂
C114	CH₃	СНз	Н	ОН	3	CH ₂
C115	CH₃CH₂	CH ₃	Н	ОН	3	CH ₂
C116	CH₃CH₂CH₂	CH ₃	Н	ОН	3	CH ₂
C117	(CH₃)₂CH	CH ₃	Н	ОН	3	CH ₂
C118	(CH₃)₃C	CH ₃	Н	ОН	3	CH ₂
C119	CH₃S	СН₃	Н	ОН	3	CH ₂
C120	CH₃SO	CH ₃	Н	ОН	3	CH₂
C121	CH ₃ SO ₂	СН₃	Н	ОН	3	CH ₂
C122	Ph	СН₃	Н	ОН	3	CH ₂
C123	CH₃O	СН₃	Н	ОН	3	CH ₂
C124	CH₃OC(O)	СН₃	Н	ОН	3	CH ₂
C125	CH ₃ CH ₂ OC(O)	СН₃	Н	ОН	3	CH ₂
C126	CH ₂ =CHCH ₂	CH₃	Н	ОН	3	CH₂
C127	HCCCH ₂	СН₃	Н	ОН	3	CH ₂
C128	CF₃	CH ₃	Н	ОН	3	CH ₂
C129	(CH ₃) ₂ NSO ₂	CH ₃	Н	ОН	3	CH ₂
C130	(CH ₃) ₂ N	CH₃	Н	ОН	3	CH ₂
C131	PhO	CH₃	Н	ОН	3	CH ₂
		_				_

Radical	R_6	R_7	R ₁₆	R ₁₀	р	W
C132	PhS	CH ₃	Н	ОН	3	CH ₂
C133	PhSO	CH ₃	Н	ОН	3	CH ₂
C134	PhSO ₂	CH ₃	Н	ОН	3	CH ₂
C135	CN	CH ₃	Н	ОН	3	CH ₂
C136	CH ₃ CH ₂	CH ₃ CH ₂	Н	ОН	1	CH ₂
C137	Н	Н	Н	ОН	1	CH(CH ₃)
C138	CH ₃	Н	Н	ОН	1	CH(CH ₃)
C139	CH ₃	CH ₃	Н	ОН	1	CH(CH ₃)
C140	CH ₂ CH ₃	Н	Н	ОН	1	CH(CH ₃)
C141	CH₂CH₃	CH ₃	Н	ОН	1	CH(CH ₃)
C142	CH ₃ CH ₂	CH ₃ CH ₂	Н	ОН	1	CH(CH ₃)
C143	Н	Н	CH ₃	ОН	1	CH ₂
C144	CH ₃	CH ₃	CH ₃	ОН	1	CH ₂
C145	CH ₃ CH ₂	CH ₃ CH ₂	CH ₃	ОН	1	CH ₂
C146	Н	Н	Н	ОН	2	CH ₂
C147	CH ₃	CH ₃	Н	ОН	2	CH ₂
C148	CH ₃ CH ₂	CH ₃ CH ₂	Н	ОН	2	CH ₂
C149	Н	Н	Н	ОН	5	CH ₂
C150	CH ₃	CH ₃	Н	ОН	5	CH ₂
C151	CH ₃ CH ₂	CH ₃ CH ₂	Н	ОН	5	CH ₂
C152	CH₃	Н	Н	ОН	2	CH ₂

In Table 4 which follows, Q is Q₃

and Q_3 the following radicals D:

Table 4: Radicals D:

Radical	Re	D	D	R	В	_
Badicai	He	F5→	Ho	H ₁₂	H	റ

Radical	R_6	R_7	R ₈	R ₁₂	R ₁₀	0
D1	Н	Н	Н	Н	ОН	2
D2	CH₃	Н	Н	Н	ОН	2
D3	CH₃CH₂	Н	Н	Н	ОН	2
D4	CH ₃ CH ₂ CH ₂	Н	Н	Н	ОН	2
D5	(CH ₃) ₂ CH	Н	Н	Н	ОН	2
D6	(CH ₃) ₃ C	Н	Н	Н	ОН	2
D7	CH₃S	Н	Н	Н	ОН	2
D8	CH₃SO	Н	Н	Н	ОН	2
D9	CH₃SO₂	Н	Н	Н	ОН	2
D10	Ph	Н	Н	Н	ОН	2
D11	CH₃O	Н	Н	Н	ОН	2
D12	CH ₂ =CHCH ₂	Н	Н	Н	ОН	2
D13	HCCCH ₂	Н	Н	Н	ОН	2
D14	CF ₃	Н	Н	Н	ОН	2
D15	PhO	Н	Н	Н	ОН	2
D16	PhS	Н	Н	Н	ОН	2
D17	PhSO	Н	Н	Н	ОН	2
D18	PhSO ₂	Н	Н	Н	ОН	2
D19	CH₃	CH ₃	Н	Н	ОН	2
D20	CH ₃ CH ₂	CH ₃	Н	Н	ОН	2
D21	CH ₃ CH ₂ CH ₂	CH ₃	Н	Н	ОН	2
D22	(CH ₃) ₂ CH	CH ₃	Н	Н	ОН	2
D23	(CH ₃) ₃ C	CH ₃	Н	Н	ОН	2
D24	CH₃S	CH ₃	Н	Н	ОН	2
D25	CH₃SO	CH ₃	Н	Н	ОН	2
D26	CH₃SO₂	CH ₃	Н	Н	ОН	2
D27	Ph	CH ₃	Н	Н	ОН	2
D28	CH₃O	CH ₃	Н	Н	ОН	2
D29	CH ₂ =CHCH ₂	CH ₃	Н	Н	ОН	·2
D30	HCCCH ₂	CH ₃	Н	Н	ОН	2
D31	CF ₃	CH ₃	Н	Н	ОН	2
D32	PhO	CH ₃	Н	Н	ОН	2

D = 4! = -1	Б	_	_	_	_	
Radical	R ₆	R ₇	R ₈	R ₁₂	R ₁₀	0
D33	PhS	CH₃	Н	Н	ОН	2
D34	PhSO	CH₃	Н	Н	ОН	2
D35	PhSO ₂	CH₃	Н	Н	ОН	2
D36	Н	Н	Н	Н	ОН	3
D37	CH ₃	Н	Н	Н	ОН	3
D38	CH ₃ CH ₂	Н	Н	Н	ОН	3
D39	CH₃CH₂CH₂	Н	Н	Н	ОН	3
D40	(CH ₃) ₂ CH	Н	Н	Н	ОН	3
D41	$(CH_3)_3C$	Н	Н	Н	ОН	3
D42	CH₃S	Н	Н	Н	ОН	3
D43	CH₃SO	Н	Н	Н	ОН	3
D44	CH₃SO₂	Н	Н	Н	ОН	3
D45	Ph	Н	Н	Н	ОН	3
D46	CH₃O	Н	Н	Н	ОН	3
D47	CH ₂ =CHCH ₂	Н	Н	Н	ОН	3
D48	HCCCH₂	Н	Н	Н	ОН	3
D49	CF₃	Н	Н	Н	ОН	3
D50	PhO	Н	Н	Н	ОН	3
D51	PhS	Н	Н	Н	ОН	3
D52	PhSO	Н	Н	Н	ОН	3
D53	PhSO₂	Н	Н	Н	ОН	3
D54	CH₃	CH₃	Н	Н	ОН	3
D55	CH₃CH₂	СН₃	Н	Н	ОН	3
D56	CH₃CH₂CH₂	СН₃	Н	Н	ОН	3
D57	(CH₃)₂CH	СН₃	Н	Н	ОН	3
D58	(CH ₃) ₃ C	СН₃	Н	Н	ОН	3
D59	CH₃S	СН₃	Н	Н	ОН	3
D60	CH₃SO	CH ₃	Н	Н	ОН	3
D61	CH ₃ SO ₂	CH₃	Н	Н	ОН	3
D62	Ph	CH₃	Н	Н	ОН	3
D63	CH₃O	CH ₃	Н	Н	ОН	3
D64	CH ₂ =CHCH ₂	CH₃	Н	Н	ОН	3
D65	HCCCH ₂	CH₃	Н	Н	ОН	3
	-	_				

Radical	R_{6}	R_7	R ₈	R ₁₂	R ₁₀	0
D66	CF₃	CH ₃	Н	Н	ОН	3
D67	PhO	CH ₃	Н	Н	ОН	3
D68	PhS	CH ₃	H	Н	ОН	3
D69	PhSO	CH ₃	Н	Н	ОН	3
D70	PhSO ₂	CH₃	Н	Н	ОН	3
D71	Н	H	Н	Н	ОН	4
D72	CH₃	Н	Н	Н	ОН	4
D73	CH₃CH₂	Н	Н	Н	ОН	4
D74	CH ₃ CH ₂ CH ₂	Н	Н	Н	ОН	4
D75	(CH₃)₂CH	Н	Н	Н	ОН	4
D76	(CH ₃) ₃ C	Н	Н	Н	ОН	4
D77	CH₃S	Н	Н	Н	ОН	4
D78	CH₃SO	Н	Н	Н	ОН	4
D79	CH ₃ SO ₂	Н	Н	Н	ОН	4
D80	Ph	Н	Н	Н	ОН	4
D81	CH ₃ O	Н	Н	Н	ОН	4
D82	CH ₂ =CHCH ₂	Н	Н	Н	ОН	4
D83	HCCCH ₂	Н	Н	Н	ОН	4
D84	CF ₃	Н	Н	Н	ОН	4
D85	PhO	Н	Н	Н	ОН	4
D86	PhS	Н	Н	Н	ОН	4
D87	PhSO	Н	Н	Н	ОН	4
D88	PhSO ₂	Н	Н	Н	ОН	4
D89	CH₃	CH ₃	Н	Н	ОН	4
D90	CH₃CH₂	CH ₃	Н	Н	ОН	4
D91	CH ₃ CH ₂ CH ₂	CH ₃	Н	Н	ОН	4
D92	(CH₃)₂CH	CH_3	Н	Н	ОН	4
D93	(CH₃)₃C	CH₃	Н	Н	ОН	4
D94	CH₃S	CH ₃	Н	Н	ОН	4
D95	CH₃SO	CH₃	Н	Н	ОН	4
D96	CH ₃ SO ₂	CH ₃	Н	Н	ОН	4
D97	Ph	CH ₃	Н	Н	ОН	4
D98	CH₃O	CH ₃	Н	Н	ОН	4

Radical	R_{6}	R_7	R_8	R ₁₂	R ₁₀	0
D99	CH ₂ =CHCH ₂	CH₃	H	Н	OH	4
D100	HCCCH ₂	CH₃	Н	н	OH	4
D101	CF ₃	CH₃	Н	н	OH	4
D102	PhO	CH₃	Н	Н	OH	4
D103	PhS	CH₃	Н	н	ОН	4
D104	PhSO	CH₃	Н	Н	ОН	4
D105	PhSO ₂	CH₃	Н	Н	ОН	4
D106	Н	Н	Н	СНз	ОН	4
D107	Н	Н	Н	СНз	ОН	3
D108	Н	Н	Н	Н	ОН	1
D109	СН₃	Н	Н	Н	ОН	1
D110	CH₃OC(O)	СН₃	Н	Н	ОН	1
D111	CH ₃ CH ₂ OC(O)	CH₃	Н	Н	ОН	1
D112	CH₃O	CH₃	Н	Н	ОН	1
D113	CH₃S	CH₃	Н	Н	ОН	1
D114	CH₃SO	CH ₃	Н	Н	ОН	1
D115	CH₃SO₂	CH ₃	Н	Н	ОН	1
D116	CH₃CH₂	Н	Н	Н	ОН	1
D117	CH ₃ OC(O)	CH ₃ CH ₂	Н	Н	ОН	1
D118	CH ₃ CH ₂ OC(O)	CH ₃ CH ₂	Н	Н	ОН	1
D119	CH₃O	CH ₃ CH ₂	Н	Н	ОН	1
D120	CH₃S	CH ₃ CH ₂	Н	Н	ОН	1
D121	CH₃SO	CH ₃ CH ₂	Н	Н	ОН	1
D122	CH ₃ SO ₂	CH ₃ CH ₂	Н	Н	ОН	1
D123	CH ₃ CH ₂ S	CH ₃	Н	Н	ОН	1
D124	CH₃CH₂SO	CH ₃	Н	Н	ОН	1
D125	CH ₃ CH ₂ SO ₂	CH ₃	Н	Н	ОН	1
D126	CH₃CH₂S	CH ₃ CH ₂	Н	Н	ОН	1
D127	CH₃CH₂SO	CH ₃ CH ₂	Н	Н	ОН	1
D128	CH₃CH₂SO₂	CH ₃ CH ₂	Н	Н	ОН	1
D129	Н	Н	CH₃	Н	ОН	1
D130	CH ₃	Н	CH ₃	Н	ОН	1
D131	CH₃OC(O)	CH ₃	CH ₃	Н	ОН	1

Radical	R_6	R_7	R_8	R ₁₂	R_{10}	0
D132	CH ₃ CH ₂ OC(O)	CH ₃	СН₃	Н	ОН	1
D133	CH ₃ O	СН₃	СН3	Н	ОН	1
D134	CH₃S	СН₃	CH₃	Н	ОН	1
D135	CH₃SO	CH ₃	CH₃	Н	ОН	1
D136	CH ₃ SO ₂	CH ₃	CH ₃	H	ОН	1
D137	Н	Н	Н	CH ₃	ОН	1
D138	CH₃	Н	Н	CH ₃	ОН	1
D139	Н	Н	CH ₃	CH ₃	ОН	1
D140	CH ₃ CH ₂ OC(O)	CH ₃	Н	Н	ОН	4

In Table 5 which follows, Q is Q4

$$O \xrightarrow{R_{10}} R_{6}$$

$$(W) \qquad (Q_{4})$$

$$(CH_{2})q$$

and Q_4 the following radicals E:

Table 5: Radicals E:

Dadical	_	Б.	-	\ <u>/</u>			
Radical	R_6	R_7	R_{10}	X	Y	W	q
E1	Н	Н	ОН	S	CH ₂	CH ₂	2
E2	CH ₃	Н	ОН	S	CH ₂	CH ₂	2
E3	CH₃	CH ₃	ОН	S	CH ₂	CH ₂	2
E4	CH ₃ OC(O)	Н	ОН	S	CH ₂	CH ₂	2
E5	CH ₃	CH ₃ OC(O)	ОН	S	CH ₂	CH ₂	2
E6	Н	Н	ОН	SO	CH ₂	CH ₂	2
E7	CH ₃	Н	ОН	SO	CH ₂	CH ₂	2
E8	CH ₃	CH ₃	ОН	SO	CH ₂	CH ₂	2
E9	CH ₃ OC(O)	Н	ОН	SO	CH ₂	CH ₂	2
E10	CH ₃	CH ₃ OC(O)	ОН	SO	CH ₂	CH ₂	2
E11	Н	Н	ОН	SO ₂	CH ₂	CH ₂	2

Radical	R_6	R_7	R ₁₀	X	Υ	W	q
E12	CH₃	H	ОН	SO ₂	CH ₂	CH ₂	2
E13	CH ₃	CH₃	ОН	SO ₂	CH ₂	CH ₂	2
E14	CH ₃ OC(O)	Н	ОН	SO ₂	CH ₂	CH ₂	2
E15	CH ₃	CH ₃ OC(O)	ОН	SO ₂	CH₂	CH ₂	2
E16	Н	Н	ОН	CO	0	CH ₂	2
E17	CH ₃	Н	ОН	CO	0	CH ₂	2
E18	CH ₃	CH ₃	OH	CO	0	CH ₂	2
E19	CH ₃ OC(O)	Н	ОН	CO	0	CH ₂	2
E20	CH ₃	CH ₃ OC(O)	ОН	CO	0	CH ₂	2
E21	Н	Н	ОН	CO	0	CH ₂	2
E22	CH ₃	Н	ОН	CO	0	CH ₂	2
E23	CH₃	CH ₃	ОН	CO	0	CH ₂	2
E24	CH ₃ OC(O)	Н	ОН	CO	0	CH ₂	2
E25	CH₃	CH ₃ OC(O)	ОН	CO	0	CH ₂	2
E26	Н	Н	ОН	CO	0	CH ₂	2
E27	CH₃	Н	ОН	CO	0	CH ₂	2
E28	CH ₃	CH ₃	OH	CO	0	CH₂	2
E29	CH ₃ OC(O)	Н	ОН	CO	0	CH ₂	2
E30	CH₃	CH ₃ OC(O)	ОН	CO	0	CH ₂	2

In Table 6 which follows, Q is Q_5

$$R_{10}$$
 R_{6}
 $R_{7}(Q_{5})$

and Q5 the radicals F which follow:

Table 6: Radicals F:

Radical	R_6	R_7	R_8	R ₁₀
F1	Н	Н	Н	ОН
F2	CH ₂	Н	н	ОН

Radical	R_6	R_7	R_8	R ₁₀
F3	CH ₃	CH ₃	Н	ОН
F4	CH₃	CH ₃	CH ₃	ОН
F5	Н	Н	CH ₃	ОН

 CH_3

 CH_3

Table 7: Compounds of the formula la

Н

F6

 OH

Comp.	R_2	R₃	R_4	R ₅	Q ₁ p
No.					
A1	Н	Н	Н	CF ₃	B24 0
A2	CH ₃	н	Н	CF ₃	B24 0
A 3	CH ₃ CH ₂	н	Н	CF ₃	B24 0
A4	(CH ₃) ₂ CH	н	Н	CF ₃	B24 0
A5	(CH ₃) ₃ C	н	Н	CF ₃	B24 0
A6	cyclopropyi	н	Н	CF ₃	B24 0
A7	$CH_3(CH_2)_2$	н	Н	CF ₃	B24 0
A8	CH₃OCH₂	н	Н	CF ₃	B24 0
A9	CH ₃ O(CH ₂) ₂	н	Н	CF ₃	B24 0
A10	Ph	н	Н	CF ₃	B24 0
A11	PhO	н	Н	CF ₃	B24 0
A12	PhS	Н	Н	CF ₃	B24 0
A13	PhSO	Н	Н	CF ₃	B24 0
A14	PhSO ₂	Н	Н	CF ₃	B24 0
A15	CH₃S	Н	Н	CF ₃	B24 0
A16	CH₃SO	Н	Н	CF ₃	B24 0
A17	CF ₃	н	Н	CF ₃	B24 0
A18	F₂CH	Н	Н	CF ₃	B24 0

R_2	R_3	R_4	R ₅	Q ₁	р
HCC	Н	Н	CF ₃	B24	0
CH₃CC	Н	Н	CF ₃	B24	0
CH ₂ =CH	Н	Н	CF ₃	B24	0
CH ₂ =CHCH ₂	Н	Н	CF ₃	B24	0
CH ₃ SO ₂ N(CH ₃)	Н	Н	CF ₃	B24	0
$(CH_3)_2N$	Н	Н	CF ₃	B24	0
(CH ₃) ₂ NSO ₂	Н	Н	CF ₃	B24	0
CICH ₂	Н	Н	CF ₃	B24	0
CH₃SCH₂	Н	Н	CF ₃	B24	0
CH ₃ SOCH ₂	H	Н	CF ₃	B24	0
CH ₃ SO ₂ CH ₂	н	Н	CF ₃	B24	0
[1.2.4]-triazol-1-	н	Н	CF ₃	B24	0
ylmethyl					
CH₃	CF ₃	Н	CH ₃	B24	0
CH₃	CH ₃	Н	CF ₃	B24	0
Н	Н	Н	CF ₃ CF ₂	B24	0
CH₃	Н	Н	CF ₃ CF ₂	B24	0
CH ₃ CH ₂	Н	Н	CF ₃ CF ₂	B24	0
cyclopropyl	н	Н	CF ₃ CF ₂	B24	0
(CH ₃) ₃ C	Н	Н	CF ₃ CF ₂	B24	0
(CH ₃) ₂ CH	Н	Н	CF ₃ CF ₂	B24	0
$CH_3(CH_2)_2$	Н	Н	CF ₃ CF ₂	B24	0
CH₃OCH₂	Н	Н	CF ₃ CF ₂	B24	0
$CH_3O(CH_2)_2$	Н	Н	CF ₃ CF ₂	B24	0
Ph	Н	Н	CF ₃ CF ₂	B24	0
PhO	Н	Н	CF ₃ CF ₂	B24	0
PhS	Н	Н	CF ₃ CF ₂	B24	0
PhSO	Н	Н	CF ₃ CF ₂	B24	0
PhSO ₂	н	Н	CF ₃ CF ₂	B24	0
CH₃S	н	Н	CF ₃ CF ₂	B24	0
CH₃SO	Н	.H	CF ₃ CF ₂	B24	0
CF ₃	Н	Н	CF ₃ CF ₂	B24	0
	HCC CH ₃ CC CH ₂ =CH CH ₂ =CHCH ₂ CH ₃ SO ₂ N(CH ₃) (CH ₃) ₂ N (CH ₃) ₂ N (CH ₃) ₂ NSO ₂ CICH ₂ CH ₃ SOCH ₂ CH ₃ SO ₂ CH ₂ [1.2.4]-triazol-1-ylmethyl CH ₃ CH ₃ H CH ₃ CH ₃ H CH ₃ CH ₃ CH CH ₃ CH CH ₃ (CH ₂) ₂ cyclopropyl (CH ₃) ₃ C (CH ₃) ₂ CH CH ₃ (CH ₂) ₂ CH ₃ OCH ₂ CH ₃ S CH ₃ SO	HCC H CH ₃ CC H CH ₂ =CH H CH ₂ =CHCH ₂ H CH ₃ SO ₂ N(CH ₃) H (CH ₃) ₂ N H (CH ₃) ₂ NSO ₂ H CICH ₂ H CH ₃ SCH ₂ H CH ₃ SOCH ₂ H CH ₃ SO ₂ CH ₂ H (1.2.4]-triazol-1- H ylmethyl CH ₃ CF ₃ CH ₃ H CH ₃ CH ₃ H CH ₃ CH ₂ H CH ₃ OCH ₂ H CH ₃ SO H	HCC H H CH ₃ CC H H CH ₂ =CH H H CH ₂ =CHCH ₂ H H CH ₃ SO ₂ N(CH ₃) H H (CH ₃) ₂ NSO ₂ H H CH ₃ SCH ₂ H H CH ₃ SCH ₂ H H CH ₃ SO ₂ CH ₂ H H CH ₃ CF ₃ H CH ₃ CF ₃ H CH ₃ CH ₃ H H CH ₃ H CH ₃ H CH ₃ CH ₃ H CH ₃ CH ₃ H CH ₃ CH ₄ H CH ₃ CH ₂ H H CH ₃ CH H CH ₃ S H H CH ₃ S H H CH ₃ S H H	HCC H H CF3 CH3CC H H CF3 CH2=CH H H CF3 CH2=CHCH2 H H CF3 CH3SO2N(CH3) H H CF3 (CH3)2N H H CF3 (CH3)2NSO2 H H CF3 CICH2 H H CF3 CH3SOCH2 H H CF3 CH3SOCH2 H H CF3 CH3SO2CH2 H H CF3 (H3SO2CH2 H H CF3 CH3SO2CH2 H H CF3 CH3SO2CH2 H H CF3 CH3CCH3 H H CF3 (CH3)2 H H CF3 CH3CCH2 H H CF3 CH3CCH2 H H CF3 CH3CCH2 H CF3 CH3CCCH2 H CCF3 CH3CCCH2 H CCF3 CH3CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	HCC H H CF3 B24 CH3CC H H CF3 B24 CH2=CH H H CF3 B24 CH2=CHCH2 H H CF3 B24 CH3SO2N(CH3) H H CF3 B24 (CH3)2N H H CF3 B24 (CH3)2NSO2 H H CF3 B24 CICH2 H H CF3 B24 CICH2 H H CF3 B24 CH3SOCH2 H H CF3 B24 CH3SO2CH2 H H CF3 B24 [1.2.4]-triazol-1- H H CF3 B24 CH3 CH3 CH3 H CF3 B24 CH3 CH3 CH3 H CF3 B24 CH3 CH3 CF3 H CF3 B24 CH3 CF3 H CF3 B24 CH3 CF3 H CF3 B24 CH3 CF3 CH3 H CF3 B24 CH3 CH3 CF3 H CF3 B24 CH3 CH3 CF3 CH3 CF3 B24 CH3 CH3 CH3 H CF3 B24 CH3 CH3 CH3 H CF3 B24 CH3CF2 B24 CH3CCH2 H CF3CF2 B24 CH3CCH3CCH1 H CF3CF2 B24 CH3CCH3CCH1 H CF3CF2 B24 CH3CCH1 H H CF3CF1 H H CF3CF1 B24 CH3CCH1 H H CF3CF1 H H

Comp.	R ₂	R₃	R_4	R ₅	Q_1	р
No.						
A50	F₂CH	Н	Н	CF₃CF₂	B24	0
A51	HCC	Н	Н	CF ₃ CF ₂	B24	0
A52	CH₃CC	Н	Н	CF₃CF₂	B24	0
A53	CH₂=CH	Н	Н	CF₃CF₂	B24	0
A54	CH ₂ =CHCH ₂	Н	Н	CF₃CF₂	B24	0
A55	CH ₃ SO ₂ N(CH ₃)	Н	н	CF₃CF₂	B24	0
A56	(CH ₃) ₂ N	Н	Н	CF₃CF₂	B24	0
A57	(CH3)2NSO2	Н	Н	CF₃CF₂	B24	0
A58	CICH ₂	Н	Н	CF ₃ CF ₂	B24	0
A 59	CH₃SCH₂	Н	Н	CF₃CF₂	B24	0
A60	CH₃SOCH₂	Н	Н	CF ₃ CF ₂	B24	0
A61	CH ₃ SO ₂ CH ₂	Н	Н	CF ₃ CF ₂	B24	0
A62	[1.2.4]-triazol-1-	Н	Н	CF ₃ CF ₂	B24	0
	ylmethyl					
A63	Н	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A64	CH ₃	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A65	CH ₃ CH ₂	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A66	cyclopropyl	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A67	(CH ₃) ₃ C	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A68	(CH ₃) ₂ CH	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A69	$CH_3(CH_2)_2$	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A70	CH₃OCH₂	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A71	CH ₃ O(CH ₂) ₂	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A72	Ph	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A73	PhO	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A74	PhS	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A75	PhSO	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A76	PhSO ₂	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A77	CH₃S	н	Н	CF ₃ CF ₂ CF ₂	B24	0
A78	CH₃SO	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A79	CF ₃	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A80	F₂CH	Н	Н	CF ₃ CF ₂ CF ₂	B24	0

Comp.	R_2	R ₃	R_4	R ₅	Q_1	р
No.						
A81	HCC	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A82	CH₃CC	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A83	CH₂=CH	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A84	CH ₂ =CHCH ₂	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A85	CH ₃ SO ₂ N(CH ₃)	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A86	$(CH_3)_2N$	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A87	$(CH_3)_2NSO_2$	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A88	CICH ₂	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A89	CH₃SCH₂	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A90	CH₃SOCH₂	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A91	CH₃SO₂CH₂	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
A92	[1.2.4]-triazol-1-	Н	Н	CF ₃ CF ₂ CF ₂	B24	0
	ylmethyl					
A93	Н	Н	Н	CF ₂ CI	B24	0
A94	CH₃	Н	Н	CF ₂ CI	B24	0
A95	CH₃CH₂	Н	H	CF ₂ CI	B24	0
A96	cyclopropyl	н	Н	CF ₂ CI	B24	0
A97	$(CH_3)_3C$	Н	Н	CF ₂ CI	B24	0
A98	(CH₃)₂CH	Н	Н	CF₂CI	B24	0
A99	$CH_3(CH_2)_2$	Н	Н	CF ₂ Cl	B24	0
A100	CH₃OCH₂	Н	Н	CF ₂ CI	B24	0
A101	$CH_3O(CH_2)_2$	Н	Н	CF ₂ CI	B24	0
A102	Ph	Н	Н	CF ₂ CI	B24	0
A103	PhO	Н	Н	CF ₂ CI	B24	0
A104	PhS	Н	Н	CF ₂ CI	B24	0
A105	PhSO	Н	Н	CF ₂ CI	B24	0
A106	PhSO ₂	Н	Н	CF ₂ CI	B24	0
A107	CH₃S	Н	Н	CF ₂ CI	B24	0
A108	CH₃SO	Н	Н	CF₂CI	B24	0
A109	CF ₃	Н	Н	CF ₂ CI	B24	0
A110	F₂CH	Н	Н	CF₂CI	B24	0
A111	HCC	Н	Н	CF ₂ CI	B24	0

Comp.	R_2	R ₃	R_4	R ₅	Q_1	р
No.						
A112	CH₃CC	н	Н	CF ₂ Cl	B24	0
A113	CH ₂ =CH	н	Н	CF ₂ CI	B24	0
A114	CH ₂ =CHCH ₂	H	Н	CF ₂ CI	B24	0
A115	CH ₃ SO ₂ N(CH ₃)	Н	Н	CF ₂ Cl	B24	0
A116	$(CH_3)_2N$	Н	Н	CF ₂ Cl	B24	0
A117	$(CH_3)_2NSO_2$	Н	Н	CF ₂ CI	B24	0
A118	CICH ₂	Н	Н	CF ₂ Cl	B24	0
A119	CH ₃ SCH ₂	Н	Н	CF ₂ Cl	B24	0
A120	CH₃SOCH₂	Н	н	CF ₂ Cl	B24	0
A121	CH ₃ SO ₂ CH ₂	Н	Н	CF ₂ Cl	B24	0
A122	[1.2.4]-triazol-1-	Н	Н	CF ₂ Cl	B24	0
	ylmethyl					
A123	H	Н	Н	CHF ₂	B24	0
A124	CH ₃	Н	Н	CHF ₂	B24	0
A125	CH₃CH₂	Н	Н	CHF ₂	B24	0
A126	cyclopropyl	Н	Н	CHF ₂	B24	0
A127	$(CH_3)_3C$	Н	Н	CHF ₂	B24	0
A128	(CH ₃)₂CH	Н	Н	CHF ₂	B24	0
A129	$CH_3(CH_2)_2$	Н	Н	CHF ₂	B24	0
A130	CH₃OCH₂	н	Н	CHF ₂	B24	0
A131	$CH_3O(CH_2)_2$	Н	Н	CHF ₂	B24	0
A132	Ph	Н	Н	CHF ₂	B24	0
A133	PhO	Н	Н	CHF ₂	B24	0
A134	PhS	Н	Н	CHF ₂	B24	0
A135	PhSO	Н	Н	CHF ₂	B24	0
A136	PhSO ₂	Н	Н	CHF ₂	B24	0
A137	CH₃S	Н	Н	CHF ₂	B24	0
A138	CH₃SO	Н	Н	CHF ₂	B24	0
A139	CF ₃	н	н	CHF ₂	B24	0
A140	F₂CH	Н	Н	CHF ₂	B24	0
A141	HCC	н	Н	CHF ₂	B24	0
A142	CH₃CC	Н	Н	CHF ₂	B24	0

Comp.	R ₂	R_3	R_4	R ₅	Q_1	р
No.						
A143	CH ₂ =CH	Н	Н	CHF ₂	B24	0
A144	CH ₂ =CHCH ₂	Н	Н	CHF ₂	B24	0
A145	CH ₃ SO ₂ N(CH ₃)	Н	Н	CHF ₂	B24	0
A146	$(CH_3)_2N$	Н	Н	CHF ₂	B24	0
A147	$(CH_3)_2NSO_2$	Н	Н	CHF ₂	B24	0
A148	CICH ₂	Н	Н	CHF ₂	B24	0
A149	CH₃SCH₂	Н	Н	CHF ₂	B24	0
A150	CH₃SOCH₂	Н	Н	CHF ₂	B24	0
A151	CH₃SO₂CH₂	Н	Н	CHF ₂	B24	0
A152	[1.2.4]-triazol-1-	Н	Н	CHF ₂	B24	0
	ylmethyl					
A153	Н	Н	Н		B24	0
A154	CH ₃	Н	Н	CCI ₃	B24	0
A155	CH₃CH₂	Н	Н	CCI ₃	B24	0
A156	cyclopropyl	Н	Н	CCI ₃	B24	0
A157	$(CH_3)_3C$	Н	Н	CCl ₃	B24	0
A158	(CH₃)₂CH	Н	Н	CCl ₃	B24	0
A159	$CH_3(CH_2)_2$	Н	Н	CCl ₃	B24	0
A160	CH₃OCH₂	Н	Н	CCI ₃	B24	0
A161	CH ₃ O(CH ₂) ₂	Н	Н	CCI ₃	B24	0
A162	Ph	Н	Н	CCI ₃	B24	0
A163	PhO	Н	Н	CCI ₃	B24	0
A164	PhS	Н	Н	CCI ₃	B24	0
A165	PhSO	Н	Н	CCI ₃	B24	0
A166	PhSO ₂	Н	Н	CCI ₃	B24	0
A167	CH₃S	Н	Н	CCI ₃	B24	0
A168	CH₃SO	Н	Н	CCI ₃	B24	0
A169	CF ₃	Н	Н	CCI ₃	B24	0
A170	F₂CH	Н	Н	CCI ₃	B24	0
A171	HCC	Н	Н	CCI ₃	B24	0
A172	CH₃CC	Н	Н	CCI ₃	B24	0
A173	CH ₂ =CH	Н	Н	CCI ₃	B24	0

Comp.	R_{2}	R_3	R_4	R ₅	Q_1	р
No.						
A174	CH ₂ =CHCH ₂	Н	Н	CCI ₃	B24	0
A175	CH ₃ SO ₂ N(CH ₃)	H	Н	CCI ₃	B24	0
A176	$(CH_3)_2N$	Н	Н	CCI ₃	B24	0
A177	$(CH_3)_2NSO_2$	Н	Н	CCI ₃	B24	0
A178	CICH ₂	Н	Н	CCI ₃	B24	0
A179	CH₃SCH₂	Н	Н	CCI ₃	B24	0
A180	CH₃SOCH₂	Н	Н	CCI ₃	B24	0
A181	CH ₃ SO ₂ CH ₂	Н	Н	CCI ₃	B24	0
A182	[1.2.4]-triazol-1-	Н	Н	CCI ₃	B24	0
	ylmethyl					
A183	Н	Н	CH ₃	CF ₃	B24	0
A184	CH₃	Н	CH₃	CF ₃	B24	0
A185	CH₃CH₂	Н	CH₃	CF₃	B24	0
A186	cyclopropyl	Н	CH ₃	CF ₃	B24	0
A187	$(CH_3)_3C$	Н	CH₃	CF ₃	B24	0
A188	(CH₃)₂CH	Н	CH₃	CF ₃	B24	0
A189	$CH_3(CH_2)_2$	Н	CH₃	CF ₃	B24	0
A190	CH₃OCH₂	Н	CH ₃	CF ₃	B24	0
A191	$CH_3O(CH_2)_2$	H	CH₃	CF ₃	B24	0
A192	Ph	Н	CH₃	CF ₃	B24	0
A193	PhO	Н	CH ₃	CF ₃	B24	0
A194	PhS	Н	CH₃	CF ₃	B24	0
A195	PhSO	Н	CH ₃	CF ₃	B24	0
A196	PhSO ₂	Н	CH ₃	CF ₃	B24	0
A197	CH₃S	Н	CH ₃	CF ₃	B24	0
A198	CH₃SO	Н	CH ₃	CF ₃	B24	0
A199	CF ₃	Н	CH₃	CF ₃	B24	0
A200	F₂CH	Н	CH ₃	CF ₃	B24	0
A201	HCC	Н	CH₃	CF ₃	B24	0
A202	CH₃CC	Н	CH ₃	CF ₃	B24	0
A203	CH ₂ =CH	Н	CH₃	CF ₃	B24	0
A204	CH ₂ =CHCH ₂	Н	CH ₃	CF ₃	B24	0

Comp.	R_2	R ₃	$R_{\!\scriptscriptstyle{4}}$	R ₅	Q_1	р
No.			•			•
A205	CH ₃ SO ₂ N(CH ₃)	Н	CH₃	CF ₃	B24	0
A206	$(CH_3)_2N$	Н	CH₃	CF₃	B24	0
A207	(CH ₃) ₂ NSO ₂	Н	CH₃	CF ₃	B24	0
A208	CICH ₂	Н	CH₃	CF ₃	B24	0
A209	CH₃SCH₂	н	CH₃	CF ₃	B24	0
A210	CH₃SOCH₂	Н	CH ₃	CF ₃	B24	0
A211	CH ₃ SO ₂ CH ₂	Н	CH ₃	CF₃	B24	0
A212	Н	Н	CH₃	CF ₃ CF ₂	B24	0
A213	CH₃	Н	CH₃	CF ₃ CF ₂	B24	0
A214	CH₃CH₂	Н	CH ₃	CF ₃ CF ₂	B24	0
A215	cyclopropyl	Н	CH ₃	CF ₃ CF ₂	B24	0
A216	(CH₃)₃C	Н	CH ₃	CF ₃ CF ₂	B24	0
A217	(CH₃)₂CH	Н	CH₃	CF ₃ CF ₂	B24	0
A218	CH ₃ (CH ₂) ₂	Н	CH₃	CF ₃ CF ₂	B24	0
A219	CH₃OCH₂	Н	CH₃	CF ₃ CF ₂	B24	0
A220	$CH_3O(CH_2)_2$	Н	CH₃	CF ₃ CF ₂	B24	0
A221	Ph	Н	CH₃	CF ₃ CF ₂	B24	0
A222	PhO	Н	CH ₃	CF ₃ CF ₂	B24	0
A223	PhS	Н	CH₃	CF ₃ CF ₂	B24	0
A224	PhSO	Н	CH₃	CF ₃ CF ₂	B24	0
A225	PhSO ₂	Н	CH₃	CF ₃ CF ₂	B24	0
A226	CH₃S	Н	CH₃	CF ₃ CF ₂	B24	0
A227	CH₃SO	Н	CH₃	CF ₃ CF ₂	B24	0
A228	CF ₃	Н	CH₃	CF ₃ CF ₂	B24	0
A229	F₂CH	Н	CH ₃	CF ₃ CF ₂	B24	0
A230	HCC	Н	CH₃	CF ₃ CF ₂	B24	0
A231	CH₃CC	Н	CH ₃	CF ₃ CF ₂	B24	0
A232	CH₂=CH	Н	CH ₃	CF ₃ CF ₂	B24	0
A233	CH ₂ =CHCH ₂	Н	CH₃	CF ₃ CF ₂	B24	0
A234	CH ₃ SO ₂ N(CH ₃)	Н	CH ₃	CF ₃ CF ₂	B24	0
A235	$(CH_3)_2N$	н	СН₃	CF ₃ CF ₂	B24	0
A236	$(CH_3)_2NSO_2$	Н	CH ₃	CF ₃ CF ₂	B24	0

Comp.	R_2	R_3	R_4	R ₅	Q ₁	р
No.						
A237	CICH ₂	Н	CH₃	CF ₃ CF ₂	B24	0
A238	CH₃SCH₂	Н	CH₃	CF ₃ CF ₂	B24	0
A239	CH₃SOCH₂	н	CH₃	CF ₃ CF ₂	B24	0
A240	CH ₃ SO ₂ CH ₂	Н	CH₃	CF ₃ CF ₂	B24	0
A241	Н	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A242	CH ₃	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A243	CH ₃ CH ₂	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A244	cyclopropyl	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A245	(CH ₃) ₃ C	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A246	(CH ₃)₂CH	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A247	CH ₃ (CH ₂) ₂	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A248	CH₃OCH₂	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A249	CH ₃ O(CH ₂) ₂	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A250	Ph	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A251	PhO	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A252	PhS	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A253	PhSO	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A254	PhSO ₂	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A255	CH₃S	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A256	CH₃SO	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A257	CF ₃	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A258	F₂CH	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A259	HCC	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A260	CH₃CC	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A261	CH₂=CH	н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A262	CH ₂ =CHCH ₂	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A263	CH ₃ SO ₂ N(CH ₃)	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A264	(CH₃)₂N	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A265	$(CH_3)_2NSO_2$	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A266	CICH ₂	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A267	CH₃SCH₂	Н	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A268	CH₃SOCH₂	Н	CH₃	CF ₃ CF ₂ CF ₂	B24	0

Comp.	R_2	R₃	R ₄	R_5	Q ₁	р
No.						•
A269	CH ₃ SO ₂ CH ₂	н	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A270	Н	Н	CH₃	CF₂CI	B24	0
A271	CH₃	н	CH₃	CF ₂ CI	B24	0
A272	CH ₃ CH ₂	н	CH₃	CF ₂ Cl	B24	0
A273	cyclopropyl	Н	CH ₃	CF ₂ CI	B24	0
A274	(CH ₃) ₃ C	Н	CH ₃	CF ₂ CI	B24	0
A275	(CH ₃) ₂ CH	Н	СН₃	CF ₂ CI	B24	0
A276	$CH_3(CH_2)_2$	Н	CH ₃	CF ₂ CI	B24	0
A277	CH ₃ OCH ₂	Н	CH₃	CF ₂ Cl	B24	0
A278	$CH_3O(CH_2)_2$	Н	CH ₃	CF ₂ CI	B24	0
A279	Ph	Н	CH ₃	CF ₂ CI	B24	0
A280	PhO	Н	CH ₃	CF₂CI	B24	0
A281	PhS	Н	CH ₃	CF ₂ CI	B24	0
A282	PhSO	Н	CH ₃	CF ₂ CI	B24	0
A283	PhSO ₂	Н	CH₃	CF ₂ CI	B24	0
A284	CH₃S	H	CH ₃	CF ₂ CI	B24	0
A285	CH₃SO	Н	CH₃	CF₂CI	B24	0
A286	CF ₃	Н	CH₃	CF ₂ CI	B24	0
A287	F₂CH	Н	CH ₃	CF ₂ CI	B24	0
A288	HCC	н	CH ₃	CF ₂ CI	B24	0
A289	CH₃CC	Н	CH ₃	CF ₂ CI	B24	0
A290	CH₂=CH	Н	CH ₃	CF ₂ CI	B24	0
A291	CH ₂ =CHCH ₂	Н	CH ₃	CF ₂ CI	B24	0
A292	CH ₃ SO ₂ N(CH ₃)	Н	CH ₃	CF ₂ CI	B24	0
A293	$(CH_3)_2N$	Н	CH ₃	CF ₂ CI	B24	0
A294	$(CH_3)_2NSO_2$	Н	CH ₃	CF ₂ CI	B24	0
A295	CICH ₂	н	CH ₃	CF ₂ CI	B24	0
A296	CH₃SCH₂	Н	CH₃	CF ₂ CI	B24	0
A297	CH₃SOCH₂	Н	CH ₃	CF ₂ CI	B24	0
A298	CH ₃ SO ₂ CH ₂	Н	CH ₃	CF₂CI	B24	0
A299	Н	н	CH₃	CHF ₂	B24	0
A300	CH₃	Н	CH₃	CHF ₂	B24	0

Comp.	R ₂	R ₃	R_4	R ₅	Q ₁	р
No.						
A301	CH₃CH₂	Н	СН₃	CHF ₂	B24	0
A302	cyclopropyl	Н	CH₃	CHF ₂	B24	0
A303	(CH ₃) ₃ C	н	CH₃	CHF ₂	B24	0
A304	(CH ₃) ₂ CH	Н	CH₃	CHF ₂	B24	0
A305	$CH_3(CH_2)_2$	Н	CH₃	CHF ₂	B24	0
A306	CH ₃ OCH ₂	Н	CH₃	CHF ₂	B24	0
A307	$CH_3O(CH_2)_2$	Н	СН₃	CHF ₂	B24	0
A308	Ph	Н	CH₃	CHF ₂	B24	0
A309	PhO	Н	CH₃	CHF ₂	B24	0
A310	PhS	Н	CH₃	CHF ₂	B24	0
A311	PhSO	Н	СН₃	CHF ₂	B24	0
A312	PhSO ₂	н	CH₃	CHF ₂	B24	0
A313	CH₃S	Н	CH₃	CHF ₂	B24	0
A314	CH₃SO	н	CH ₃	CHF ₂	B24	0
A315	CF ₃	Н	CH₃	CHF ₂	B24	0
A316	F ₂ CH	н	CH ₃	CHF ₂	B24	0
A317	HCC	Н	CH₃	CHF ₂	B24	0
A318	CH₃CC	н	CH₃	CHF ₂	B24	0
A319	CH₂=CH	Н	CH ₃	CHF ₂	B24	0
A320	CH ₂ =CHCH ₂	Н	CH₃	CHF ₂	B24	0
A321	CH ₃ SO ₂ N(CH ₃)	H	CH ₃	CHF ₂	B24	0
A322	$(CH_3)_2N$	Н	CH₃	CHF ₂	B24	0
A323	$(CH_3)_2NSO_2$	Н	CH₃	CHF ₂	B24	0
A324	CICH ₂	Н	CH₃	CHF ₂	B24	0
A325	CH₃SCH₂	Н	CH₃	CHF ₂	B24	0
A326	CH ₃ SOCH ₂	Н	CH ₃	CHF ₂	B24	0
A327	CH ₃ SO ₂ CH ₂	Н	CH₃	CHF ₂	B24	0
A328	Н	Н	CH₃	CCI ₃	B24	0
A329	CH ₃	Н	CH₃	CCl₃	B24	0
A330	CH₃CH₂	Н	CH₃	CCl₃	B24	0
A331	(CH ₃) ₃ C	Н	CH₃	CCI ₃	B24	0
A332	(CH ₃) ₂ CH	Н	CH₃	CCI ₃	B24	0

Comp.	R₂	R ₃	Ð	D	
No.		- 13	R_4	R ₅	Q ₁ p
A333	cyclopropyl	Н	CH₃	CCI ₃	D04 0
A334	CH ₃ (CH ₂) ₂	Н	CH₃	CCI ₃	B24 0
A335	CH ₃ OCH ₂	Н	CH₃	CCI ₃	B24 0
A336	CH ₃ O(CH ₂) ₂	н	CH₃	CCI ₃	B24 0 B24 0
A337	Ph	Н	CH₃	CCI ₃	_
A338	PhO	Н	CH₃	CCI ₃	
A339	PhS	н	CH₃	CCI ₃	B24 0 B24 0
A340	PhSO	Н	CH₃	CCI ₃	B24 0
A341	PhSO ₂	Н	CH₃	CCI ₃	B24 0
A342	CH₃S	н	CH₃	CCI ₃	B24 0
A343	CH₃SO	н	CH₃	CCI ₃	B24 0
A344	CF ₃	н	CH₃	CCI ₃	B24 0
A345	F ₂ CH	н	CH₃	CCI ₃	B24 0
A346	HCC	н	CH₃	CCl₃	B24 0
A347	CH₃CC	Н	CH₃	CCl₃	B24 0
A348	CH ₂ =CH	Н	CH₃	CCI ₃	B24 0
A349	CH ₂ =CHCH ₂	Н	CH ₃	CCl₃	B24 0
A350	CH ₃ SO ₂ N(CH ₃)	Н	CH ₃	CCI ₃	B24 0
A351	(CH₃)₂N	Н	СНз	CCI ₃	B24 0
A352	(CH ₃) ₂ NSO ₂	Н	СН₃	CCl₃	B24 0
A353	CICH ₂	н	CH₃	CCI ₃	B24 0
A354	CH₃SCH₂	Н	CH₃	CCI ₃	B24 0
A355	CH₃SOCH₂	н	CH₃	CCI ₃	B24 0
A356	CH ₃ SO ₂ CH ₂	Н	CH₃	CCl ₃	B24 0
A357	Н	н	Ph	CF ₃	B24 0
A358	CH₃	Н	Ph	CF₃	B24 0
A359	CH₃CH₂	н	Ph	CF ₃	B24 0
A360	cyclopropyl	Н	Ph	CF ₃	B24 0
A361	(CH ₃) ₃ C	Н	Ph	CF ₃	B24 0
A362	(CH ₃)₂CH	Н	Ph	CF ₃	B24 0
A363	CH ₃ (CH ₂) ₂	Н	Ph	CF ₃	B24 0
A364	CH₃OCH₂	Н	Ph	CF ₃	B24 0

Comp.	R_2	R ₃	$R_{\scriptscriptstyle{4}}$	R_5	Q ₁	р
No.				-		•
A365	CH ₃ O(CH ₂) ₂	н	Ph	CF ₃	B24	0
A366	Ph	Н	Ph	CF ₃	B24	0
A367	PhO	Н	Ph	CF ₃	B24	0
A368	PhS	Н	Ph	CF ₃	B24	0
A369	PhSO	Н	Рḥ	CF ₃	B24	0
A370	PhSO ₂	Н	Ph	CF ₃	B24	0
A371	CH₃S	Н	Ph	CF ₃	B24	0
A372	CH₃SO	н	Ph	CF ₃	B24	0
A373	CF ₃	н	Ph	CF ₃	B24	0
A374	F ₂ CH	Н	Ph	CF ₃	B24	0
A375	HCC	Н	Ph	CF ₃	B24	0
A376	CH₃CC	Н	Ph	CF ₃	B24	0
A377	CH₂=CH	Н	Ph	CF ₃	B24	0
A378	CH ₂ =CHCH ₂	н	Ph	CF ₃	B24	0
A379	CH ₃ SO ₂ N(CH ₃)	Н	Ph	CF ₃	B24	0
A380	$(CH_3)_2N$	Н	Ph	CF ₃	B24	0
A381	$(CH_3)_2NSO_2$	н	Ph	CF ₃	B24	0
A382	CICH ₂	Н	Ph	CF ₃	B24	0
A383	CH₃SCH₂	Н	Ph	CF ₃	B24	0
A384	CH₃SOCH₂	Н	Ph	CF ₃	B24	0
A385	CH ₃ SO ₂ CH ₂	Н	Ph	CF ₃	B24	0
A386	Н	Н	Ph	CF ₃ CF ₂	B24	0
A387	CH₃	Н	Ph	CF₃CF₂	B24	0
A388	CH₃CH₂	Н	Ph	CF ₃ CF ₂	B24	0
A389	cyclopropyl	н	Ph	CF ₃ CF ₂	B24	0
A390	$(CH_3)_3C$	Н	Ph	CF ₃ CF ₂	B24	0
A391	(CH ₃) ₂ CH	H	Ph	CF ₃ CF ₂	B24	0
A392	CH ₃ (CH ₂) ₂	Н	Ph	CF ₃ CF ₂	B24	0
A393	CH₃OCH₂	Н	Ph	CF ₃ CF ₂	B24	0
A394	CH ₃ O(CH ₂) ₂	н	Ph	CF ₃ CF ₂	B24	0
A395	Ph	Н	Ph	CF ₃ CF ₂	B24	0
A396	PhO	Н	Ph	CF ₃ CF ₂	B24	0

Comp.	R ₂	R₃	R_4	R ₅	Q_1	р
No.			•	· ·		
A397	PhS	Н .	Ph	CF ₃ CF ₂	B24	0
A398	PhSO	Н	Ph	CF ₃ CF ₂	B24	0
A399	PhSO ₂	Н	Ph	CF ₃ CF ₂	B24	0
A400	CH₃S	Н	Ph	CF₃CF₂	B24	0
A401	CH₃SO	Н	Ph	CF ₃ CF ₂	B24	0
A402	CF ₃	Н	Ph	CF ₃ CF ₂	B24	0
A403	F₂CH	Н	Ph	CF ₃ CF ₂	B24	0
A404	HCC	Н	Ph	CF ₃ CF ₂	B24	0
A405	CH₃CC	Н	Ph	CF ₃ CF ₂	B24	0
A406	CH₂=CH	н	Ph	CF ₃ CF ₂	B24	0
A407	CH ₂ =CHCH ₂	Н	Ph	CF ₃ CF ₂	B24	0
A408	CH ₃ SO ₂ N(CH ₃)	Н	Ph	CF ₃ CF ₂	B24	0
A409	(CH₃)₂N	Н	Ph	CF ₃ CF ₂	B24	0
A410	$(CH_3)_2NSO_2$	Н	Ph	CF ₃ CF ₂	B24	0
A411	CICH ₂	Н	Ph	CF ₃ CF ₂	B24	0
A412	CH₃SCH₂	Н	Ph	CF ₃ CF ₂	B24	0
A413	CH₃SOCH₂	Н	Ph	CF ₃ CF ₂	B24	0
A414	CH₃SO₂CH₂	Н	Ph	CF ₃ CF ₂	B24	0
A415	Н	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A416	CH₃	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A417	CH₃CH₂	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A418	cyclopropyl	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A419	(CH₃)₃C	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A420	(CH ₃) ₂ CH	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A421	$CH_3(CH_2)_2$	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A422	CH₃OCH₂	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A423	$CH_3O(CH_2)_2$	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A424	Ph	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A425	PhO	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A426	PhS	н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A427	PhSO	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A428	PhSO ₂	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0

Comp.	R ₂	R ₃	R ₄	R_5	Q ₁	р
No.						
A429	CH₃S	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A430	CH₃SO	н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A431	CF ₃	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A432	F ₂ CH	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A433	HCC	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A434	CH₃CC	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A435	CH ₂ =CH	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A436	CH ₂ =CHCH ₂	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A437	CH ₃ SO ₂ N(CH ₃)	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A438	$(CH_3)_2N$	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A439	$(CH_3)_2NSO_2$	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A440	CICH ₂	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A441	CH₃SCH₂	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A442	CH ₃ SOCH ₂	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A443	CH ₃ SO ₂ CH ₂	Н	Ph	CF ₃ CF ₂ CF ₂	B24	0
A444	Н	Н	Ph	CF ₂ CI	B24	0
A445	CH₃	Н	Ph	CF ₂ CI	B24	0
A446	CH₃CH₂	Н	Ph	CF ₂ CI	B24	0
A447	cyclopropyl	Н	Ph	CF ₂ CI	B24	0
A448	$(CH_3)_3C$	н	Ph	CF ₂ CI	B24	0
A449	(CH ₃) ₂ CH	Н	Ph	CF ₂ CI	B24	0
A450	$CH_3(CH_2)_2$	Н	Ph	CF ₂ CI	B24	0
A451	CH₃OCH₂	Н	Ph	CF ₂ CI	B24	0
A452	$CH_3O(CH_2)_2$	Н	Ph	CF ₂ CI	B24	0
A453	Ph	Н	Ph	CF ₂ CI	B24	0
A454	PhO	Н	Ph	CF ₂ Cl	B24	0
A455	PhS	Н	Ph	CF ₂ CI	B24	0
A456	PhSO	Н	Ph	CF ₂ CI	B24	0
A457	PhSO ₂	Н	Ph	CF ₂ CI	B24	0
A458	CH₃S	Н	Ph	CF ₂ CI	B24	0
A459	CH₃SO	Н	Ph	CF ₂ CI	B24	0
A460	CF ₃	Н	Ph	CF ₂ CI	B24	0

Comp.	R_2	R_3	R_4	R ₅	Q_1	р
No.						
A461	F₂CH	Н	Ph	CF₂CI	B24	0
A462	HCC	Н	Ph	CF ₂ CI	B24	0
A463	CH₃CC	Н	Ph	CF ₂ Cl	B24	0
A464	CH ₂ =CH	Н	Ph	CF ₂ CI	B24	0
A465	CH ₂ =CHCH ₂	Н	Ph	CF₂CI	B24	0
A466	CH ₃ SO ₂ N(CH ₃)	н	Ph	CF₂CI	B24	0
A467	$(CH_3)_2N$	Н	Ph	CF ₂ CI	B24	0
A468	$(CH_3)_2NSO_2$	Н	Ph	CF ₂ CI	B24	0
A469	CICH ₂	Н	Ph	CF₂CI	B24	0
A470	CH₃SCH₂	Н	Ph	CF₂CI	B24	0
A471	CH₃SOCH₂	Н	Ph	CF ₂ Cl	B24	0
A472	CH ₃ SO ₂ CH ₂	Н	Ph	CF ₂ CI	B24	0
A473	Н	Н	Ph	CHF ₂	B24	0
A474	CH₃	Н	Ph	CHF ₂	B24	0
A475	CH₃CH₂	Н	Ph	CHF ₂	B24	0
A476	cyclopropyl	Н	Ph	CHF ₂	B24	0
A477	$(CH_3)_3C$	Н	Ph	CHF ₂	B24	0
A478	(CH ₃) ₂ CH	Н	Ph	CHF ₂	B24	0
A479	$CH_3(CH_2)_2$	Н	Ph	CHF ₂	B24	0
A480	CH₃OCH₂	Н	Ph	CHF ₂	B24	0
A481	$CH_3O(CH_2)_2$	Н	Ph	CHF ₂	B24	0
A482	Ph	Н	Ph	CHF ₂	B24	0
A483	PhO	Н	Ph	CHF ₂	B24	0
A484	PhS	Н	Ph	CHF ₂	B24	0
A485	PhSO	н	Ph	CHF ₂	B24	0
A486	PhSO ₂	Н	Ph	CHF ₂	B24	0
A487	CH₃S	н	Ph	CHF ₂	B24	0
A488	CH₃SO	н	Ph	CHF ₂	B24	0
A489	CF ₃	Н	Ph	CHF ₂	B24	0
A490	F₂CH	Н	Ph	CHF ₂	B24	Ω
A491	HCC	Н	Ph	CHF ₂	B24	0
A492	CH₃CC	н	Ph	CHF ₂	B24	0

Comp.	R_2	R_3	R_4	R ₅	Q_1	р
No.						
A493	CH₂=CH	Н	Ph	CHF ₂	B24	0
A494	CH ₂ =CHCH ₂	Н	Ph	CHF ₂	B24	0
A495	CH ₃ SO ₂ N(CH ₃)	Н	Ph	CHF ₂	B24	0
A496	(CH₃)₂N	Н	Ph	CHF ₂	B24	0
A497	(CH3)2NSO2	Н	Ph	CHF ₂	B24	0
A498	CICH ₂	Н	Ph	CHF ₂	B24	0
A499	CH₃SCH₂	Н	Ph	CHF ₂	B24	0
A500	CH₃SOCH₂	Н	Ph	CHF ₂	B24	0
A501	CH ₃ SO ₂ CH ₂	н	Ph	CHF ₂	B24	0
A502	Н	Н	Ph	CCl ₃	B24	0
A503	CH ₃	Н	Ph	CCI ₃	B24	0
A504	CH ₃ CH ₂	Н	Ph	CCI ₃	B24	0
A505	cyclopropyl	Н	Ph	CCI ₃	B24	0
A506	(CH ₃) ₃ C	Н	Ph	CCI ₃	B24	0
A507	(CH ₃) ₂ CH	Н	Ph	CCI ₃	B24	0
A508	$CH_3(CH_2)_2$	Н	Ph	CCI ₃	B24	0
A509	CH ₃ OCH ₂	Н	Ph	CCI ₃	B24	0
A510	$CH_3O(CH_2)_2$	Н	Ph	CCl ₃	B24	0
A511	Ph	Н	Ph	CCI ₃	B24	0
A512	PhO	Н	Ph	CCI ₃	B24	0
A513	PhS	Н	Ph	CCI ₃	B24	0
A514	PhSO	Н	Ph	CCI ₃	B24	0
A515	PhSO₂	Н	Ph	CCI ₃	B24	0
A516	CH₃S	Н	Ph	CCI ₃	B24	0
A517	CH₃SO	Н	Ph	CCl ₃	B24	0
A518	CF ₃	Н	Ph	CCI ₃	B24	0
A519	F₂CH	н	Ph	CCI ₃	B24	0
A520	HCC	Н	Ph	CCI ₃	B24	0
A521	CH₃CC	Н	Ph	CCI ₃	B24	0
A522	CH₂=CH	Н	Ph	CCI ₃	B24	0
A523	CH ₂ =CHCH ₂	Н	Ph	CCI ₃	B24	0
A524	$CH_3SO_2N(CH_3)$	Н	Ph	CCI ₃	B24	0

Comp.	R_2	R ₃	R_4	R₅	Q ₁	р
No.						
A525	(CH₃)₂N	Н	Ph	CCI ₃	B24	0
A526	(CH ₃) ₂ NSO ₂	Н	Ph	CCI ₃	B24	0
A527	CICH ₂	н	Ph	CCI ₃	B24	0
A528	CH₃SCH₂	Н	Ph	CCI ₃	B24	0
A529	CH₃SOCH₂	Н	Ph	CCI ₃	B24	0
A530	CH₃SO₂CH₂	Н	Ph	CCI ₃	B24	0
A531	Н	CH ₃	Н	CF ₃	B24	0
A532	Н	CH₃CH₂	Н	CF ₃	B24	0
A533	Н	cyclopropyl	Н	CF ₃	B24	0
A534	Н	(CH₃)₃CH	Н	CF₃	B24	0
A535	Н	(CH₃)₂CH	Н	CF₃	B24	0
A536	Н	CH ₃ (CH ₂) ₂	Н	CF₃	B24	0
A537	Н	CH₃OCH₂	Н	CF₃	B24	0
A538	Н	$CH_3O(CH_2)_2$	Н	CF ₃	B24	0
A539	Н	Ph	Н	CF ₃	B24	0
A540	H *	PhO	Н	CF ₃	B24	0
A541	н	PhS	Н	CF ₃	B24	0
A542	Н	PhSO	Н	CF ₃	B24	0
A543	Н	PhSO ₂	Н	CF ₃	B24	0
A544	Н	CH₃S	Н	CF ₃	B24	0
A545	Н	CH₃SO	Н	CF ₃	B24	0
A546	Н	CF ₃	Н	CF ₃	B24	0
A547	Н	F ₂ CH	Н	CF ₃	B24	0
A548	Н	HCC	Н	CF ₃	B24	0
A549	Н	CH₃CC	Н	CF ₃	B24	0
A550	Н	CH ₂ =CH	Н	CF ₃	B24	0
A551	Н	CH ₂ =CHCH ₂	H	CF ₃	B24	0
A552	Н	CH ₃ SO ₂ N(CH ₃)	Н	CF ₃	B24	0
A553	Н	$(CH_3)_2N$	Н	CF ₃	B24	0
A554	Н	$(CH_3)_2NSO_2$	н	CF ₃	B24	0
A555	Н	CH₃SCH₂	Н	CF ₃	B24	0
A556	Н	CH₃SOCH₂	Н	CF ₃	B24	0

Comp.	R_2	R ₃	R ₄	R ₅	Q ₁	р
No.	_	•		5	~,	۲
A557	н	CH ₃ SO ₂ CH ₂	Н	CF₃	B24	0
A558	Н	CH₃	Н	CF ₃ CF ₂	B24	0
A559	Н	CH₃CH₂	Н	CF ₃ CF ₂	B24	0
A560	н	cyclopropyl	Н	CF ₃ CF ₂	B24	0
A561	н	(CH ₃) ₃ C	Н	CF ₃ CF ₂	B24	0
A562	Н	(CH₃)₂CH	Н	CF ₃ CF ₂	B24	0
A563	н	CH ₃ (CH ₂) ₂	Н	CF ₃ CF ₂	B24	0
A564	Н	CH₃OCH₂	Н	CF₃CF₂	B24	0
A565	Н		Н	CF ₃ CF ₂	B24	0
A566	Н	Ph	Н	CF₃CF₂	B24	0
A567	н	PhO	н	CF ₃ CF ₂	B24	0
A568	Н	PhS	Н	CF ₃ CF ₂	B24	0
A569	Н	PhSO	Н	CF ₃ CF ₂	B24	0
A570	Н	PhSO ₂	Н	CF₃CF₂	B24	0
A571	Н	CH₃S	Н	CF ₃ CF ₂	B24	0
A572	Н	CH₃SO	Н	CF₃CF₂	B24	0
A573	Н	CF ₃	Н	CF ₃ CF ₂	B24	0
A574	Н	F₂CH	Н	CF ₃ CF ₂	B24	0
A575	Н	HCC	Н	CF₃CF₂	B24	0
A576	Н	CH₃CC	Н	CF₃CF₂	B24	0
A577	Н	CH ₂ =CH	Н	CF₃CF₂	B24	0
A578	н	CH ₂ =CHCH ₂	Н	CF₃CF₂	B24	0
A579	Н	CH ₃ SO ₂ N(CH ₃)	Н	CF ₃ CF ₂	B24	0
A580	Н	(CH₃)₂N	Н	CF ₃ CF ₂	B24	0
A581	н	$(CH_3)_2NSO_2$	Н	CF ₃ CF ₂	B24	0
A582	Н	CH₃SCH₂	Н	CF₃CF₂	B24	0
A583	Н	CH ₃ SOCH ₂	Н	CF ₃ CF ₂	B24	0
A584	Н	CH ₃ SO ₂ CH ₂	Н	CF ₃ CF ₂	B24	0
A585	Н	CH ₃	Н	CF ₃ CF ₂ CF ₂	B24	0
A586	Н	CH ₃ CH ₂	Н	CF ₃ CF ₂ CF ₂	B24	0
A587	Н	cyclopropyl	Н	CF ₃ CF ₂ CF ₂	B24	0
A588	н	(CH ₃) ₃ C	Н	CF ₃ CF ₂ CF ₂	B24	0

Comp.	R_2	R ₃	R_4	R ₅	Q_1	р
No.						
A589	н	(CH ₃) ₂ CH	Н	CF ₃ CF ₂ CF ₂	B24	0
A590	Н	$CH_3(CH_2)_2$	Н	CF ₃ CF ₂ CF ₂	B24	0
A591	Н	CH ₃ OCH ₂	Н	CF ₃ CF ₂ CF ₂	B24	0
A592	н	$CH_3O(CH_2)_2$	Н	CF ₃ CF ₂ CF ₂	B24	0
A593	Н	Ph	Н	CF ₃ CF ₂ CF ₂	B24	0
A594	Н	PhO	Н	CF ₃ CF ₂ CF ₂	B24	0
A595	н	PhS	Н	CF ₃ CF ₂ CF ₂	B24	0
A596	Н	PhSO	Н	CF ₃ CF ₂ CF ₂	B24	0
A597	н	PhSO ₂	Н	CF ₃ CF ₂ CF ₂	B24	0
A598	н	CH₃S	н	CF ₃ CF ₂ CF ₂	B24	0
A599	Н	CH₃SO	Н	CF ₃ CF ₂ CF ₂	B24	0
A600	H	CF ₃	Н	CF ₃ CF ₂ CF ₂	B24	0
A601	Н	F₂CH	Н	CF ₃ CF ₂ CF ₂	B24	0
A602	н	HCC	Н	CF ₃ CF ₂ CF ₂	B24	0
A603	Н	CH₃CC	Н	CF ₃ CF ₂ CF ₂	B24	0
A604	Н	CH ₂ =CH	Н	CF ₃ CF ₂ CF ₂	B24	0
A605	н	CH ₂ =CHCH ₂	Н	CF ₃ CF ₂ CF ₂	B24	0
A606	н	CH₃SO₂N(CH₃)	Н	CF ₃ CF ₂ CF ₂	B24	0
A607	Н	(CH₃)₂N	Н	CF ₃ CF ₂ CF ₂	B24	0
A608	Н	$(CH_3)_2NSO_2$	Н	CF ₃ CF ₂ CF ₂	B24	0
A609	н	CH₃SCH₂	Н	CF ₃ CF ₂ CF ₂	B24	0
A610	Н	CH₃SOCH₂	Н	CF ₃ CF ₂ CF ₂	B24	0
A611	Н	CH₃SO₂CH₂	Н	CF ₃ CF ₂ CF ₂	B24	0
A612	Н	CH₃	Н	CF ₂ CI	B24	0
A613	Н	CH₃CH₂	Н	CF ₂ CI	B24	0
A614	Н	cyclopropyl	Н	CF ₂ CI	B24	0
A615	Н	(CH ₃) ₃ C	Н	CF ₂ CI	B24	0
A616	Н	(CH ₃) ₂ CH	Н	CF ₂ CI	B24	0
A617	Н	$CH_3(CH_2)_2$	Н	CF ₂ CI	B24	0
A618	Н	CH₃OCH₂	Н	CF ₂ CI	B24	0
A619	Н	CH ₃ O(CH ₂) ₂	Н	CF₂CI	B24	0
A620	Н	Ph	Н	CF₂CI	B24	0

Comp.	R_2	R ₃	R_4	R ₅	Q_1	р
No.						
A621	Н	PhO	Н	CF ₂ CI	B24	0
A622	Н	PhS	Н	CF₂Cl	B24	0
A623	Н	PhSO	Н	CF ₂ CI	B24	0
A624	Н	PhSO ₂	Н	CF ₂ Cl	B24	0
A625	Н	CH₃S	Н	CF₂CI	B24	0
A626	Н	CH₃SO	Н	CF ₂ CI	B24	0
A627	Н	CF ₃	Н	CF ₂ Cl	B24	0
A628	Н	F₂CH	Н	CF₂CI	B24	0
A629	Н	HCC	Н	CF ₂ CI	B24	0
A630	Н	CH₃CC	Н	CF ₂ Cl	B24	0
A631	Н	CH ₂ =CH	Н	CF ₂ Cl	B24	0
A632	Н	CH ₂ =CHCH ₂	Н	CF₂CI	B24	0
A633	. Н	CH ₃ SO ₂ N(CH ₃)	Н	CF ₂ CI	B24	0
A634	Н	(CH₃)₂N	Н	CF ₂ Cl	B24	0
A635	Н	$(CH_3)_2NSO_2$	Н	CF ₂ CI	B24	0
A636	Н	CH₃SCH₂	Н	CF ₂ CI	B24	0
A637	Н	CH₃SOCH₂	Н	CF ₂ Cl	B24	0
A638	Н	CH ₃ SO ₂ CH ₂	Н	CF ₂ Cl	B24	0
A639	Н	CH ₃	Н	CHF ₂	B24	0
A640	Н	CH₃CH₂	Н	CHF ₂	B24	0
A641	Н	cyclopropyl	Н	CHF ₂	B24	0
A642	Н	(CH₃)₃C	Н	CHF ₂	B24	0
A643	Н	(CH₃)₂CH	Н	CHF ₂	B24	0
A644	Н	$CH_3(CH_2)_2$	Н	CHF ₂	B24	0
A645	Н	CH ₃ OCH ₂	Н	CHF ₂	B24	0
A646	Н	$CH_3O(CH_2)_2$	Н	CHF ₂	B24	0
A647	Н	Ph	Н	CHF ₂	B24	0
A648	Н	PhO	Н	CHF ₂	B24	0
A649	Н	PhS	Н	CHF ₂	B24	0
A650	Н	PhSO	Н	CHF ₂	B24	0
A651	Н	PhSO ₂	Н	CHF ₂	B24	0
A652	Н	CH₃S	Н	CHF ₂	B24	0

Comp.	R_2	R ₃	R_4	R_5	Q_1	р
No.						
A653	н	CH₃SO	Н	CHF ₂	B24	0
A654	Н	CF ₃	Н	CHF ₂	B24	0
A655	н	F₂CH	Н	CHF ₂	B24	0
A656	н	HCC	Н	CHF ₂	B24	0
A657	Н	CH₃CC	Н	CHF ₂	B24	0
A658	Н	CH₂=CH	Н	CHF ₂	B24	0
A659	Н	CH ₂ =CHCH ₂	Н	CHF ₂	B24	0
A660	Н	CH₃SO₂N(CH₃)	Н	CHF ₂	B24	0
A661	Н	(CH ₃) ₂ N	Н	CHF ₂	B24	0
A662	Н	$(CH_3)_2NSO_2$	Н	CHF ₂	B24	0
A663	Н	CH₃SCH₂	Н	CHF ₂	B24	0
A664	Н "	CH ₃ SOCH ₂	Н	CHF ₂	B24	0
A665	Н	CH ₃ SO ₂ CH ₂	Н	CHF ₂	B24	0
A666	Н	CH ₃	Н	CCI ₃	B24	0
A667	Н	CH₃CH₂	Н	CCI ₃	B24	0
A668	Н	cyclopropyl	Н	CCI ₃	B24	0
A669	Н	(CH ₃) ₃ C	Н	CCI ₃	B24	0
A670	Н	(CH ₃) ₂ CH	Н	CCI ₃	B24	0
A671	Н	$CH_3(CH_2)_2$	Н	CCI ₃	B24	0
A672	Н	CH₃OCH₂	Н	CCI ₃	B24	0
A673	Н	CH ₃ O(CH ₂) ₂	Н	CCI ₃	B24	0
A674	Н	Ph	Н	CCI ₃	B24	0
A675	Н	PhO	Н	CCI ₃	B24	0
A676	Н	PhS	Н	CCI ₃	B24	0
A677	Н	PhSO	Н	CCl₃	B24	0
A678	Н	PhSO ₂	Н	CCI ₃	B24	0
A679	Н	CH₃S	Н	CCI ₃	B24	0
A680	Н	CH₃SO	Н	CCI ₃	B24	0
A681	Н	CF ₃	Н	CCI ₃	B24	0
A682	н	F₂CH	Н	CCI ₃	B24	0
A683	н	HCC	Н	CCI ₃	B24	0
A684	Н	CH₃CC	Н	CCI ₃	B24	0

Comp.	R_2	R_3	R_4	R ₅	Q_1	p
No.						
A685	Н	CH ₂ =CH	Н	CCl ₃	B24	0
A686	Н	CH ₂ =CHCH ₂	Н	CCI ₃	B24	0
A687	Н	CH₃SO₂N(CH₃)	Н	CCl ₃	B24	0
A688	Н	$(CH_3)_2N$	Н	CCI ₃	B24	0
A689	Н	$(CH_3)_2NSO_2$	Н	CCI ₃	B24	0
A690	Н	CH₃SCH₂	Н	CCI ₃	B24	0
A691	Н	CH₃SOCH₂	Н	CCl ₃	B24	0
A692	Н	CH ₃ SO ₂ CH ₂	Н	CCI ₃	B24	0
A693	н	CH₃	CH ₃	CF ₃	B24	0
A694	Н	CH₃CH₂	CH ₃	CF₃	B24	0
A695	Н	cyclopropyl	CH₃	CF ₃	B24	0
A696	Н	(CH₃)₃C	CH ₃	CF ₃	B24	0
A697	H	(CH₃)₂CH	CH ₃	CF ₃	B24	0
A698	н	$CH_3(CH_2)_2$	CH ₃	CF ₃	B24	0
A699	Н	CH₃OCH₂	CH ₃	CF ₃	B24	0
A700	Н	$CH_3O(CH_2)_2$	CH₃	CF ₃	B24	0
A701	Н	Ph	CH ₃	CF ₃	B24	0
A702	Н	PhO	CH ₃	CF ₃	B24	0
A703	Н	PhS	CH ₃	CF ₃	B24	0
A704	Н	PhSO	CH ₃	CF ₃	B24	0
A705	Н	PhSO ₂	CH ₃	CF ₃	B24	0
A706	Н	CH₃S	CH ₃	CF ₃	B24	0
A707	Н	CH₃SO	CH ₃	CF ₃	B24	0
A708	н	CF ₃	CH ₃	CF ₃	B24	0
A709	Н	F₂CH	CH ₃	CF ₃	B24	0
A710	Н	HCC	CH₃	CF ₃	B24	0
A711	Н	CH₃CC	CH₃	CF ₃	B24	0
A712	Н	CH ₂ =CH	CH ₃	CF ₃	B24	0
A713	Н	CH ₂ =CHCH ₂	CH₃	CF ₃	B24	0
A714	Н	CH₃SO₂N(CH₃)	CH ₃	CF ₃	B24	0
A715	Н	(CH₃)₂N	CH ₃	CF ₃	B24	0
A716	Н	$(CH_3)_2NSO_2$	CH ₃	CF ₃	B24	0

Comp.	R_{2}	R_3	R_4	R_5	Q ₁	р
No.				_	·	•
A717	Н	CH₃SCH₂	CH₃	CF₃	B24	0
A718	Н	CH₃SOCH₂	СН₃	CF₃	B24	0
A719	Н	CH ₃ SO ₂ CH ₂	СН₃	CF₃	B24	0
A720	Н	CH₃	СН₃	CF ₃ CF ₂	B24	0
A721	н	CH₃CH₂	СН₃	CF ₃ CF ₂	B24	0
A722	Н	cyclopropyl	СН₃	CF ₃ CF ₂	B24	0
A723	Н	(CH₃)₃C	СН₃	CF ₃ CF ₂	B24	0
A724	Н	(CH ₃) ₂ CH	СН₃	CF₃CF₂	B24	0
A725	Н	CH ₃ (CH ₂) ₂	СН₃	CF₃CF₂	B24	0
A726	н	CH₃OCH₂	CH₃	CF ₃ CF ₂	B24	0
A727	Н	CH ₃ O(CH ₂) ₂	CH₃	CF ₃ CF ₂	B24	0
A728	н	Ph	СН₃	CF ₃ CF ₂	B24	0
A729	Н	PhO	СН₃	CF₃CF₂	B24	0
A730	Н	PhS	СН₃	CF₃CF₂	B24	0
A731	Н	PhSO	CH₃	CF ₃ CF ₂	B24	0
A732	Н	PhSO ₂	СН₃	CF ₃ CF ₂	B24	0
A733	Н	CH₃S	СН₃	CF ₃ CF ₂	B24	0
A734	Н	CH₃SO	CH₃	CF ₃ CF ₂	B24	0
A735	Н	CF ₃	CH₃	CF ₃ CF ₂	B24	0
A736	Н	F ₂ CH	CH ₃	CF₃CF₂	B24	0
A737	Н	HCC	CH ₃	CF ₃ CF ₂	B24	0
A738	Н	CH₃CC	CH₃	CF₃CF₂	B24	0
A739	н	CH ₂ =CH	CH₃	CF ₃ CF ₂	B24	0
A740	Н	CH ₂ =CHCH ₂	CH ₃	CF ₃ CF ₂	B24	0
A741	Н	CH ₃ SO ₂ N(CH ₃)	CH₃	CF ₃ CF ₂	B24	0
A742	Н	$(CH_3)_2N$	CH₃	CF ₃ CF ₂	B24	0
A743	Н	$(CH_3)_2NSO_2$	CH₃	CF ₃ CF ₂	B24	0
A744	Н	CH₃SCH₂	CH ₃	CF ₃ CF ₂	B24	0
A745	Н	CH₃SOCH₂	CH ₃	CF ₃ CF ₂	B24	0
A746	Н	CH ₃ SO ₂ CH ₂	CH ₃	CF ₃ CF ₂	B24	0
A747	Н	CH₃	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A748	н	CH₃CH₂	CH ₃	CF ₃ CF ₂ CF ₂	B24	0

Comp.	R_2	R ₃	R_4	R ₅	Q ₁	р
No.						
A749	Н	cyclopropyl	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A750	Н	(CH₃)₃C	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A751	Н	(CH ₃) ₂ CH	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A752	Н	CH ₃ (CH ₂) ₂	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A753	Н	CH₃OCH₂	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A754	Н	CH ₃ O(CH ₂) ₂	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A755	Н	Ph	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A756	Н	PhO	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A757	Н	PhS	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A758	Н	PhSO	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A759	Н	PhSO ₂	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A760	Н	CH₃S	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A761	, Н	CH₃SO	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A762	Н	CF ₃	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A763	Н	F₂CH	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A764	Н	HCC	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A765	Н	CH₃CC	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A766	Н	CH ₂ =CH	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A767	Н	CH ₂ =CHCH ₂	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A768	Н	CH₃SO₂N(CH₃)	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A769	Н	$(CH_3)_2N$	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A770	Н	$(CH_3)_2NSO_2$	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A771	Н	CH₃SCH₂	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A772	Н	CH₃SOCH₂	CH ₃	CF ₃ CF ₂ CF ₂	B24	0
A773	Н	CH ₃ SO ₂ CH ₂	CH₃	CF ₃ CF ₂ CF ₂	B24	0
A774	Н	CH₃	CH₃	CF ₂ Cl	B24	0
A775	Н	CH₃CH₂	CH₃	CF ₂ Cl	B24	0
A776	Н	cyclopropyl	CH ₃	CF ₂ Cl	B24	0
A777	Н	(CH₃)₃C	CH ₃	CF ₂ Cl	B24	0
A778	Н	(CH ₃) ₂ CH	CH₃	CF ₂ Cl	B24	0
A779	Н	$CH_3(CH_2)_2$	CH ₃	CF ₂ Cl	B24	0
A780	н	CH₃OCH₂	CH ₃	CF ₂ CI	B24	0

Comp.	R ₂	R_3	R_{4}	R ₅	Q ₁	р
No.				· ·	•	•
A781	Н	CH ₃ O(CH ₂) ₂	СН₃	CF ₂ CI	B24	0
A782	Н	Ph	CH₃	CF₂CI	B24	0
A783	н	PhO	СН₃	CF₂CI	B24	0
A784	Н	PhS	CH₃	CF ₂ CI	B24	0
A785	Н	PhSO	CH₃	CF ₂ CI	B24	0
A786	Н	PhSO ₂	CH₃	CF ₂ CI	B24	0
A787	Н	CH₃S	CH ₃	CF₂CI	B24	0
A788	Н	CH₃SO	CH ₃	CF ₂ CI	B24	0
A789	Н	CF₃	CH ₃	CF ₂ CI	B24	0
A790	Н	F ₂ CH	CH ₃	CF ₂ CI	B24	0
A791	Н	HCC	СН₃	CF ₂ CI	B24	0
A792	Н	CH₃CC	CH ₃	CF ₂ CI	B24	0
A793	Н	CH ₂ =CH	CH ₃	CF ₂ CI	B24	0
A794	Н	CH ₂ =CHCH ₂	CH ₃	CF₂CI	B24	0
A795	Н	$CH_3SO_2N(CH_3)$	CH ₃	CF ₂ CI	B24	0
A796	Н	$(CH_3)_2N$	CH₃	CF ₂ CI	B24	0
A797	Н	$(CH_3)_2NSO_2$	CH ₃	CF₂CI	B24	0
A798	Н	CH₃SCH₂	CH₃	CF ₂ CI	B24	0
A799	Н	CH₃SOCH₂	CH ₃	CF₂CI	B24	0
A800	Н	CH ₃ SO ₂ CH ₂	CH ₃	CF₂CI	B24	0
A801	Н	CH₃	CH ₃	CHF ₂	B24	0
A802	Н	CH₃CH₂	CH ₃	CHF ₂	B24	0
A803	Н	cyclopropyl	CH ₃	CHF ₂	B24	0
A804	Н	$(CH_3)_3C$	CH ₃	CHF ₂	B24	0
A805	Н	(CH₃)₂CH	CH ₃	CHF ₂	B24	0
A806	H	$CH_3(CH_2)_2$	CH ₃	CHF ₂	B24	0
A807	Н	CH ₃ OCH ₂	CH ₃	CHF ₂	B24	0
A808	Н	$CH_3O(CH_2)_2$	CH ₃	CHF ₂	B24	0
A809	Н	Ph	CH ₃	CHF ₂	B24	0
A810	Н	PhO	CH ₃	CHF ₂	B24	0
A811	Н	PhS	CH ₃	CHF ₂	B24	0
A812	Н	PhSO	CH ₃	CHF ₂	B24	0

Comp.	R_2	R ₃	R ₄	R_5	Q_1	р
No.						·
A813	н	PhSO₂	СН₃	CHF ₂	B24	0
A814	н	CH₃S	СН₃	CHF ₂	B24	0
A815	Н	CH₃SO	СН₃	CHF ₂	B24	0
A816	Н	CF₃	CH₃	CHF ₂	B24	0
A817	Н	F₂CH	CH₃	CHF ₂	B24	0
A818	Н	HCC	СН₃	CHF ₂	B24	0
A819	Н	CH₃CC	CH₃	CHF ₂	B24	0
A820	Н	CH₂=CH	CH₃	CHF ₂	B24	0
A821	Н	CH ₂ =CHCH ₂	CH₃	CHF ₂	B24	0
A822	Н	CH ₃ SO ₂ N(CH ₃)	CH₃	CHF ₂	B24	0
A823	Н	$(CH_3)_2N$	CH₃	CHF ₂	B24	0
A824	Н	$(CH_3)_2NSO_2$	CH₃	CHF ₂	B24	0
A825	Н	CH₃SCH₂	CH₃	CHF ₂	B24	0
A826	Н	CH₃SOCH₂	CH₃	CHF ₂	B24	0
A827	Н	CH ₃ SO ₂ CH ₂	CH₃	CHF ₂	B24	0
A828	Н	CH₃	CH ₃	CCl₃	B24	0
A829	Н	CH₃CH₂	CH ₃	CCI ₃	B24	0
A830	Н	cyclopropyl	CH ₃	CCI ₃	B24	0
A831	Н	(CH ₃) ₃ C	СН₃	CCI ₃	B24	0
A832	Н	(CH ₃) ₂ CH	CH ₃	CCI₃	B24	0
A833	н	$CH_3(CH_2)_2$	CH₃	CCl₃	B24	0
A834	Н	CH ₃ OCH ₂	CH ₃	CCI ₃	B24	0
A835	Н	$CH_3O(CH_2)_2$	CH ₃	CCI ₃	B24	0
A836	Н	Ph	CH ₃	CCI ₃	B24	0
A837	Н	PhO	CH ₃	CCI ₃	B24	0
A838	Н	PhS	CH ₃	CCI ₃	B24	0
A839	Н	PhSO	CH ₃	CCI ₃	B24	0
A840	Н	PhSO ₂	CH ₃	CCI ₃	B24	0
A841	Н	CH₃S	CH ₃	CCI ₃	B24	0
A842	Н	CH₃SO	CH₃	CCI ₃	B24	0
A843	Н	CF ₃	CH ₃	CCI ₃	B24	0
A844	Н	F₂CH	CH ₃	CCI ₃	B24	0

Comp.	R_2	R ₃	R_4	R_5	Q ₁	р
No.						
A845	Н	HCC	CH ₃	CCI ₃	B24	0
A846	Н	CH₃CC	CH ₃	CCI ₃	B24	0
A847	Н	CH₂=CH	CH ₃	CCI ₃	B24	0
A848	Н	CH ₂ =CHCH ₂	CH₃	CCI ₃	B24	0
A849	Н	CH ₃ SO ₂ N(CH ₃)	СН₃	CCI ₃	B24	0
A850	Н	(CH ₃) ₂ N	СН₃	CCI ₃	B24	0
A851	Н	$(CH_3)_2NSO_2$	СНз	CCI ₃	B24	0
A852	Н	CH₃SCH₂	CH₃	CCI ₃	B24	0
A853	Н	CH ₃ SOCH ₂	CH₃	CCI ₃	B24	0
A854	Н	CH ₃ SO ₂ CH ₂	CH ₃	CCl ₃	B24	0
A855	Н	CH₃	Ph	CF ₃	B24	0
A856	Н	CH₃CH₂	Ph	CF ₃	B24	0
A857	Н	(CH ₃)₂CH	Ph	CF ₃	B24	0
A858	Н	(CH ₃) ₂ CH	Ph	CF ₃	B24	0
A859	Н	cyclopropyl	Ph	CF ₃	B24	0
A860	Н	$CH_3(CH_2)_2$	Ph	CF ₃	B24	0
A861	Н	CH ₃ OCH ₂	Ph	CF ₃	B24	0
A862	Н	$CH_3O(CH_2)_2$	Ph	CF ₃	B24	0
A863	Н	Ph	Ph	CF ₃	B24	0
A864	Н	PhO	Ph	CF ₃	B24	0
A865	Н	PhS	Ph	CF ₃	B24	0
A866	Н	PhSO	Ph	CF ₃	B24	0
A867	Н	PhSO₂	Ph	CF ₃	B24	0
A868	Н	CH₃S	Ph	CF ₃	B24	0
A869	Н	CH₃SO	Ph	CF ₃	B24	0
A870	Н	CF ₃	Ph	CF ₃	B24	0
A871	Н	F₂CH	Ph	CF ₃	B24	0
A872	Н	HCC	Ph	CF ₃	B24	0
A873	Н	CH₃CC	Ph	CF ₃	B24	0
A874	Н	CH ₂ =CH	Ph	CF ₃	B24	0
A875	Н	CH ₂ =CHCH ₂	Ph	CF ₃	B24	0
A876	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CF ₃	B24	0

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Comp.	R_2	R ₃	R_4	R₅	Q_1	р
No.						
A877	Н	$(CH_3)_2N$	Ph	CF₃	B24	0
A878	Н	(CH ₃) ₂ NSO ₂	Ph	CF₃	B24	0
A879	Н	CH₃SCH₂	Ph	CF₃	B24	0
A880	Н	CH₃SOCH₂	Ph	CF₃	B24	0
A881	Н	CH ₃ SO ₂ CH ₂	Ph	CF₃	B24	0
A882	Н	CH₃	Ph	CF ₃ CF ₂	B24	0
A883	Н	CH₃CH₂	Ph	CF₃CF₂	B24	0
A884	Н	cyclopropyl	Ph	CF ₃ CF ₂	B24	0
A885	Н	$(CH_3)_3C$	Ph	CF ₃ CF ₂	B24	0
A886	Н	(CH ₃) ₂ CH	Ph	CF ₃ CF ₂	B24	0
A887	Н	CH ₃ (CH ₂) ₂	Ph	CF ₃ CF ₂	B24	0
A888	Н	CH ₃ OCH ₂	Ph	CF ₃ CF ₂	B24	0
A889	Н	$CH_3O(CH_2)_2$	Ph	CF ₃ CF ₂	B24	0
A890	Н	Ph	Ph	CF ₃ CF ₂	B24	0
A891	Н	PhO	Ph	CF ₃ CF ₂	B24	0
A892	Н	PhS	Ph	CF ₃ CF ₂	B24	0
A893	Н	PhSO	Ph	CF ₃ CF ₂	B24	0
A894	Н	PhSO ₂	Ph	CF ₃ CF ₂	B24	0
A895	Н	CH₃S	Ph	CF ₃ CF ₂	B24	0
A896	H	CH₃SO	Ph	CF ₃ CF ₂	B24	0
A897	Н	CF₃	Ph	CF ₃ CF ₂	B24	0
A898	Н	F₂CH	Ph	CF ₃ CF ₂	B24	0
A899	Н	HCC	Ph	CF ₃ CF ₂	B24	0
A900	Н	CH₃CC	Ph	CF ₃ CF ₂	B24	0
A901	Н	CH₂=CH	Ph	CF ₃ CF ₂	B24	0
A902	Н	CH ₂ =CHCH ₂	Ph	CF ₃ CF ₂	B24	0
A903	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CF ₃ CF ₂	B24	0
A904	Н	$(CH_3)_2N$	Ph	CF ₃ CF ₂	B24	0
A905	Н	$(CH_3)_2NSO_2$	Ph	CF ₃ CF ₂	B24	0
A906	Н	CH₃SCH₂	Ph	CF ₃ CF ₂	B24	0
A907	Н	CH₃SOCH₂	Ph	CF ₃ CF ₂	B24	0
A908	Н	CH ₃ SO ₂ CH ₂	Ph	CF ₃ CF ₂	B24	0

Comp.	R_{2}	R_3	R_4	$R_{\scriptscriptstyle{5}}$	Q ₁	р
No.	-	·	• -4	5		۲
A909	н	CH₃	Ph	CF ₃ CF ₂ CF ₂	B24	0
A910	Н	CH₃CH₂	Ph	CF ₃ CF ₂ CF ₂		0
A911	н	cyclopropyl	Ph	CF ₃ CF ₂ CF ₂	B24	0
A912	Н	(CH₃)₃C	Ph	CF ₃ CF ₂ CF ₂	B24	0
A913	Н	(CH₃)₂CH	Ph	CF ₃ CF ₂ CF ₂	B24	0
A914	Н	CH ₃ (CH ₂) ₂	Ph	CF ₃ CF ₂ CF ₂	B24	0
A915	Н	CH₃OCH₂	Ph	CF ₃ CF ₂ CF ₂	B24	0
A916	Н	CH ₃ O(CH ₂) ₂	Ph	CF ₃ CF ₂ CF ₂	B24	0
A917	Н	Ph	Ph	CF ₃ CF ₂ CF ₂	B24	0
A918	Н	PhO	Ph	CF ₃ CF ₂ CF ₂	B24	0
A919	Н	PhS	Ph	CF ₃ CF ₂ CF ₂	B24	0
A920	н	PhSO	Ph	CF ₃ CF ₂ CF ₂	B24	0
A921	н	PhSO ₂	Ph	CF ₃ CF ₂ CF ₂	B24	0
A922	н	CH₃S	Ph	CF ₃ CF ₂ CF ₂	B24	0
A923	н	CH₃SO	Ph	CF ₃ CF ₂ CF ₂	B24	0
A924	Н	CF ₃	Ph	CF ₃ CF ₂ CF ₂	B24	0
A925	Н	F ₂ CH	Ph	CF ₃ CF ₂ CF ₂	B24	0
A926	Н	HCC	Ph	CF ₃ CF ₂ CF ₂	B24	0
A927	Н	CH₃CC	Ph	CF ₃ CF ₂ CF ₂	B24	0
A928	Н	CH ₂ =CH	Ph	CF ₃ CF ₂ CF ₂	B24	0
A929	н	CH ₂ =CHCH ₂	Ph	CF ₃ CF ₂ CF ₂	B24	0
A930	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CF ₃ CF ₂ CF ₂	B24	0
A931	Н	(CH₃)₂N	Ph	CF ₃ CF ₂ CF ₂	B24	0
A932	Н	$(CH_3)_2NSO_2$	Ph	CF ₃ CF ₂ CF ₂	B24	0
A933	Н	CH₃SCH₂	Ph	CF ₃ CF ₂ CF ₂	B24	0
A934	Н	CH₃SOCH₂	Ph	CF ₃ CF ₂ CF ₂	B24	0
A935	Н	CH₃SO₂CH₂	Ph	CF ₃ CF ₂ CF ₂	B24	0
A936	Н	CH₃	Ph	CF ₂ CI	B24	0
A937	Н	CH₃CH₂	Ph	CF ₂ CI	B24	0
A938	н	cyclopropyl	Ph	CF ₂ Cl	B24	0
A939	н	(CH₃)₃C	Ph	CF ₂ Cl	B24	0
A940	Н	(CH₃)₂CH	Ph	CF ₂ Cl	B24	0

Comp.	R_2	R ₃	R_4	R_5	Q ₁	р
No.						
A941	Н	$CH_3(CH_2)_2$	Ph	CF₂CI	B24	0
A942	Н	CH ₃ OCH ₂	Ph	CF ₂ Cl	B24	0
A943	Н	$CH_3O(CH_2)_2$	Ph	CF ₂ CI	B24	0
A944	Н	Ph	Ph	CF ₂ CI	B24	0
A945	Н	PhO	Ph	CF ₂ CI	B24	0
A946	Н	PhS	Ph	CF ₂ Cl	B24	0
A947	Н	PhSO	Ph	CF ₂ CI	B24	0
A948	Н	PhSO ₂	Ph	CF ₂ Cl	B24	0
A949	Н	CH₃S	Ph	CF₂CI	B24	0
A950	Н	CH₃SO	Ph	CF ₂ CI	B24	0
A951	Н	CF ₃	Ph	CF ₂ CI	B24	0
A952	Н	F₂CH	Ph	CF ₂ Cl	B24	0
A953	Н	HCC	Ph	CF ₂ CI	B24	0
A954	Н	CH₃CC	Ph	CF ₂ Cl	B24	0
A955	Н	CH₂=CH	Ph	CF ₂ CI	B24	0
A956	Н	CH ₂ =CHCH ₂	Ph	CF ₂ CI	B24	0
A957	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CF ₂ Cl	B24	0
A958	Н	(CH₃)₂N	Ph	CF ₂ CI	B24	0
A959	Н	$(CH_3)_2NSO_2$	Ph	CF ₂ CI	B24	0
A960	Н	CH₃SCH₂	Ph	CF ₂ CI	B24	0
A961	Н	CH₃SOCH₂	Ph	CF ₂ CI	B24	0
A962	Н	CH ₃ SO ₂ CH ₂	Ph	CF ₂ Cl	B24	0
A963	Н	CH ₃	Ph	CHF ₂	B24	0
A964	Н	CH₃CH₂	Ph	CHF ₂	B24	0
A965	Н	(CH ₃) ₃ C	Ph	CHF ₂	B24	0
A966	Н	(CH ₃) ₂ CH	Ph	CHF ₂	B24	0
A967	Н	cyclopropyl	Ph	CHF ₂	B24	0
A968	Н	$CH_3(CH_2)_2$	Ph	CHF ₂	B24	0
A969	Н	CH₃OCH₂	Ph	CHF ₂	B24	0
A970	Н	$CH_3O(CH_2)_2$	Ph	CHF ₂	B24	0
A971	Н	Ph	Ph	CHF ₂	B24	0
A972	Н	PhO	Ph	CHF ₂	B24	0

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Comp.	R ₂	R ₃	R ₄	R_5	Q_1	р
No.						
A973	Н	PhS	Ph	CHF ₂	B24	0
A974	Н	PhSO	Ph	CHF ₂	B24	0
A975	Н	PhSO ₂	Ph	CHF ₂	B24	0
A976	Н	CH₃S	Ph	CHF ₂	B24	0
A977	Н	CH₃SO	Ph	CHF ₂	B24	0
A978	Н	CF ₃	Ph	CHF ₂	B24	0
A979	Н	F₂CH	Ph	CHF ₂	B24	0
A980	Н	HCC	Ph	CHF ₂	B24	0
A981	Н	CH₃CC	Ph	CHF ₂	B24	0
A982	Н	CH ₂ =CH	Ph	CHF ₂	B24	0
A983	Н	CH ₂ =CHCH ₂	Ph	CHF ₂	B24	0
A984	Н	CH ₃ SO ₂ N(CH ₃)	Ph	CHF ₂	B24	0
A985	Н	(CH₃)₂N	Ph	CHF ₂	B24	0
A986	Н	$(CH_3)_2NSO_2$	Ph	CHF ₂	B24	0
A987	Н	CH₃SCH₂	Ph	CHF ₂	B24	0
A988	Н	CH₃SOCH₂	Ph	CHF ₂	B24	0
A989	Н	CH₃SO₂CH₂	Ph	CHF ₂	B24	0
A990	Н	CH₃	Ph	CCI ₃	B24	0
A991	Н	CH₃CH₂	Ph	CCI ₃	B24	0
A992	Н	(CH ₃) ₃ C	Ph	CCI ₃	B24	0
A993	Н	(CH₃)₂CH	Ph	CCl ₃	B24	0
A994	Н	cyclopropyl	Ph	CCI ₃	B24	0
A995	Н	$CH_3(CH_2)_2$	Ph	CCI ₃	B24	0
A996	Н	CH ₃ OCH ₂	Ph	CCI ₃	B24	0
A997	Н	$CH_3O(CH_2)_2$	Ph	CCI ₃	B24	0
A998	Н	Ph	Ph	CCI ₃	B24	0
A999	Н	PhO	Ph	CCI ₃	B24	0
A1000	Н	PhS	Ph	CCI ₃	B24	0

PhSO

PhSO₂

CH₃S

CH₃SO

Ph

Ph

Ph

Ph

CCI₃

CCI₃

CCI₃

CCI₃

B24 0

B24 0

B24 0

B24 0

A1001

A1002

A1003

A1004

Н

Н

Н

Н

Comp.	R_2	R ₃	R_4	R ₅	Q_1	р
No.						
A1005	Н	CF ₃	Ph	CCI ₃	B24	0
A1006	Н	F₂CH	Ph	CCl ₃	B24	0
A1007	Н	HCC	Ph	CCI ₃	B24	0
A1008	Н	CH₃CC	Ph	CCI ₃	B24	0
A1009	Н	CH ₂ =CH	Ph	CCI ₃	B24	0
A1010	H	CH ₂ =CHCH ₂	Ph	CCI ₃	B24	0
A1011	H	CH ₃ SO₂N(CH ₃)	Ph	CCl₃	B24	0
A1012	Н	(CH₃)₂N	Ph	CCI ₃	B24	0
A1013	Н	$(CH_3)_2NSO_2$	Ph	CCI ₃	B24	0
A1014	Н	CH ₃ SCH ₂	Ph	CCI ₃	B24	0
A1015	Н	CH₃SOCH₂	Ph	CCI ₃	B24	0
A1016	Н	CH ₃ SO ₂ CH ₂	Ph		B24	0
A1017	F	Н	Н	CF ₃	B24	0
A1018	Cl	Н	Н	CF ₃	B24	0
A1019	Br	Н	Н	CF ₃	B24	0
A1020	NC	н	Н	CF ₃	B24	0
A1021	CH₃SO₂O	Н	Н	CF ₃	B24	0
A1022	CH₃O	Н	Н	CF ₃	B24	0
A1023	CH₃CH₂O	Н	Н	CF ₃	B24	0
A1024	CH ₂ CH=CH ₂ O	Н	Н	CF ₃	B24	0
A1025	HCCCH ₂ O	Н	Н	CF ₃	B24	0
A1026	PhCH₂S	Н	Н	CF ₃	B24	0
A1027	PhCH ₂ SO ₂	Н	Н	CF ₃	B24	0
A1028	CICH₂CH₂	Н	Н	CF₃	B24	0
A1029	BrCH ₂	Н	Н	CF ₃	B24	0
A1030	FCH ₂	Н	Н	CF ₃	B24	0
A1031	CHF ₂ CH ₂	Н	Н	CF₃	B24	0
A1032	CF₃CH₂	Н	Н	CF₃	B24	0
A1033	[1,3]-imidazol-1-	Н	∕-H	CF ₃	B24	0
	ylmethyl					
A1034	CHCl₂CH₂	Н	Н	CF ₃	B24	0
A1035	CICH=CH	Н	Н	CF ₃	B24	0

Comp.	R_2	R₃	R_4	R ₅	Q_1	р
No.						
A1036	Cl ₂ C=CH	Н	Н	CF ₃	B24	0
A1037	CF₃CH=CH	Н	Н	CF ₃	B24	0
A1038	CICC	Н	Н	CF ₃	B24	0
A1039	PhCH ₂	H	Н	CF ₃	B24	0
A1040	CH ₃ CH ₂	CH₃	Н	CF ₃	B24	0
A1041	CH ₃	ОН	Н	CF ₃	B24	0
A1042	CH ₃	F	Н	CF ₃	B24	0
A1043	CH ₃	CI	Н	CF ₃	B24	0
A1044	F	CH₃	Н	CF ₃	B24	0
A1045	CI	CH ₃	Н	CF ₃	B24	0
A1046	Н	F	Н	CF ₃	B24	0
A1047	Н	CI	Н	CF ₃	B24	0
A1048	Н	Br	Н	CF₃	B24	0
A1049	Н	ОН	Н	CF ₃	B24	0
A1050	Н.,	OCH₃	Н	CF ₃	B24	0
A1051	Н	OCHF ₂	Н	CF ₃	B24	0
A1052	Н	OSO ₂ CH ₃	Н	CF ₃	B24	0
A1053	Н	OSO ₂ CF ₃	Н	CF ₃	B24	0
A1054	Н	CICH ₂	Н	CF ₃	B24	0
A1055	Н	BrCH ₂	Н	CF ₃	B24	0
A1056	Н	FCH ₂	Н	CF ₃	B24	0
A1057	Н	CHF ₂ CH ₂	Н	CF ₃	B24	0
A1058	Н	CF ₃ CH ₂	Н	CF ₃	B24	0
A1059	Н	triazolylmethyl	Н	CF ₃	B24	0
A1060	Н	CHCl ₂ CH ₂	Н	CF ₃	B24	0
A1061	Н	CICH=CH	Н	CF ₃	B24	0
A1062	Н	Cl ₂ C=CH	Н	CF ₃	B24	0
A1063	Н	CF₃CH=CH	Н	CF ₃	B24	0
A1064	Н	CICC	Н	CF ₃	B24	0
A1065	Н	CH₃C(O)	Н	CF ₃	B24	0
A1066	Н	Ph	Н	CF ₃	B24	0
A1067	Н	SO₂CH₃	Н	CF ₃	B24	0

Comp.	R_2	R_3	R_4	R ₅	Q_1	р
No.						
A1068	Н	SO ₂ CF ₃	Н	CF ₃	B24	0
A1069	Н	NC	H ,	CF ₃	B24	0
A1070	н	NO_2	Н	CF ₃	B24	0
A1071	CH₃	Н	F	CF ₃	B24	0
A1072	CH₃	н	Cl	CF ₃	B24	0
A1073	CH₃	Н	Br	CF ₃	B24	0
A1074	CH₃	н	NC	CF ₃	B24	0
A1075	CH₃	Н	CH₃O	CF ₃	B24	0
A1076	CH₃	Н	CH₃S	CF ₃	B24	0
A1077	CH₃	Н	CH₃SO	CF ₃	B24	0
A1078	CH₃	Н	CH ₃ SO ₂	CF ₃	B24	0
A1079	CH ₃ CH ₂ OCH ₂	Н	Н	CF ₃	B24	0
A1080	PhOCH ₂	Н	н	CF ₃	B24	0
A1081	NOCH ₂	Н	Н	CF₃	B24	0
A1082	$(CH_3)_2CH_2OCH_2$	Н	Н	CF ₃	B24	0
A1083	BrCH ₂ CH ₂	Н	Н	CF ₃	B24	0
A1084	FCH ₂ CH ₂	Н	Н	CF ₃	B24	0
A1085	N SCH ₂	Н	Н	CF ₃		0
A1086	N SOCH ₂	Н	Н	CF ₃	B24	0
A1087	N SO ₂ CH ₂	Н	Н	CF ₃	B24	0
A1088	O N SCH ₂	н	Н	CF ₃	B24	0
A1089	N SOCH ₂	Н	Н	CF ₃	B24	0
A1090	O N SO ₂ CH ₂	Н	Н	CF ₃	B24	0

Comp.	R_2	R ₃	R_4	R_5	Q_1	р
No.						
A1091	cyclopropyl-CH₂	Н	Н	CF ₃	B24	0
A1092	2,2-dichlorocycloprop-	Н	Н	CF ₃	B24	0
	1-yl					
A1093	CH₃OC(O)CH=CH	Н	Н	CF ₃	B24	0
A1094	CH ₃ CH ₂ OC(O)CH=CH	Н	Н	CF ₃	B24	0
A1095	ClCH₂CH=CH	Н	Н	CF ₃		0
A1096	CH=C=CH	Н	Н	CF ₃	B24	0
A1097	$(CH_3)_2NCH_2$	Н	н	CF ₃	B24	0
A1098	HOCH₂	Н	н	CF ₃	B24	0
A1099	CH ₃ C(O)OCH ₂	Н	Н	CF ₃	B24	0
A1100	PhC(O)OCH ₂	Н	Н	CF ₃	B24	0
A1101	PhCH₂CH₂	Н	Н	CF ₃	B24	0
A1102	CH₃OC(O)CH₂	Н	Н	CF ₃	B24	0
A1103	NCCH ₂	Н	Н	CF ₃	B24	0
A1104	$CH_3(CH_2)_7SCH_2$	Н	Н	CF ₃	B24	0
A1105	CH ₃ (CH ₂) ₇ SOCH ₂	Н	Н	CF ₃	B24	0
A1106	CH ₃ (CH ₂) ₇ SO ₂ CH ₂	Н	Н	CF ₃	B24	0
A1107	()	Н	Н	CF ₃	B24	0
	Ü					
A1108	CICH₂CC	Н	Н	CF₃	B24	0
A1109	CHF ₂ CH ₂ CH ₂	Н	Н	CF₃	B24	0
A1110	CHCl ₂ CH ₂ CH ₂	Н	Н	CF ₃	B24	0
A1111	CF₃SO₂O	Н	Н	CF ₃	B24	0
A1112	()	Н	Н	CF ₃	B24	0
	Ü					
A1113	()	Н	Н	CF ₃	B24	0
A1114	()	Н	н	CF₃	B24	0
				-		
A1115	N CH ₂	Н	Н	CF₃	B24	0
			-	- · U	·	-

Comp.	R_2	R ₃	R ₄	R ₅	Q_1	р
A1116	N CH ₂	Н	н	CF ₃	B24	0
A1117	CH ₂	Н	Н	CF₃	B24	0
A1118	CH ₃ ON=CHCH ₂	Н	Н	CF ₃	B24	0
A1119	O=CHCH ₂	Н	Н	CF ₃	B24	0
A1120	CH ₃ CH ₂ OCH ₂	Н	Н	CF₂CI	B24	0
A1121	PhOCH₂	Н	Н	CF ₂ CI	B24	0
A1122	NOCH ₂	Н	Н	CF₂CI	B24	0
A1123	(CH ₃) ₂ CH ₂ OCH ₂	Н	Н	CF ₂ CI	B24	0
A1124	BrCH ₂	Н	Н	CF ₂ CI	B24	0
A1125	FCH₂	Н	Н	CF₂CI	B24	0
A1126	SCH ₂	Н	Н	CF₂CI	B24	0
A1127	N SOCH₂	Н	Н	CF₂Cl	B24	0
A1128	N SO ₂ CH ₂	Н	Н	CF₂CI	B24	0
A1129	O N SCH ₂	Н	H	CF₂CI	B24	0
A1130	O N SOCH ₂	Н	Н	CF₂CI	B24	0
A1131	O N SO ₂ CH ₂	Н	Н	CF₂CI	B24	0
A1132	cyclopropyl-CH ₂	Н	Н	CF ₂ CI	B24	0
A1133	2,2-dichlorocycloprop-	Н	Н	CF₂CI	B24	0
	1-yl		•			
A1134	CH₃OC(O)CH=CH	Н	Н	CF ₂ CI	B24	0
A1135	CH ₃ CH ₂ OC(O)CH=CH	Н	Н	CF ₂ CI	B24	0

Comp.	R_2	R_3	R_4	R ₅	Q_1	р
No.						
A1136	CICH₂CH=CH	Н	Н	CF₂CI	B24	0
A1137	CH=C=CH	Н	Н	CF ₂ Cl	B24	0
A1138	(CH ₃) ₂ NCH ₂	Н	Н	CF₂CI	B24	0
A1139	HOCH₂	Н	Н	CF ₂ Cl	B24	0
A1140	CH ₃ C(O)OCH ₂	Н	Н	CF ₂ CI	B24	0
A1141	PhC(O)OCH ₂	н	Н	CF₂CI	B24	0
A1142	PhCH ₂	Н	Н	CF ₂ CI	B24	0
A1143	CH ₃ OC(O)CH ₂	Н	Н	CF ₂ CI	B24	0
A1144	NCCH ₂	н	Н	CF ₂ CI	B24	0
A1145	CH ₃ (CH ₂) ₇ SCH ₂	Н	Н	CF ₂ CI	B24	0
A1146	CH ₃ (CH ₂) ₇ SOCH ₂	Н	Н	CF ₂ CI	B24	0
A1147	CH ₃ (CH ₂) ₇ SO ₂ CH ₂	Н	Н	CF ₂ Cl	B24	0
A1148	()	Н	Н	CF ₂ CI	B24	0
A1149	CICH ₂ CC	Н	Н	CF ₂ CI	B24	0
A1150	Br	Н	н	CF ₂ CI	B24	0
A1151	CI	Н	Н	CF ₂ Cl	B24	0
A1152	CF ₃ SO ₂ O	Н	Н	CF ₂ CI	B24	0
A1153	N. ()	Н	Н	CF ₂ CI	B24	0
A1154	()	Н	Н	CF ₂ Cl	B24	0
A1155	()	Н	Н	CF ₂ CI	B24	0
A1156	N CH ₂	Н	н	CF₂CI	B24	0
				_		
A1157	N CH ₂	Н	Н	CF ₂ CI	B24	0
A1158	CH ₂	Н	ш	CE CI	DO4	^
71100		11	Н	CF₂CI	B24	U
A1159	CH ₃ ON=CHCH ₂	Н	Н	CF₂CI	B24	0
A1160	O=CHCH ₂	Н	Н	CF₂CI	B24	0

Comp.	R_2	R ₃	R_4	R ₅	Q_1	р
No.						
A1161	CH₃CH₂OCH₂	Н	Н	CF ₂ H	B24	0
A1162	PhOCH ₂	H	н	CF ₂ H	B24	0
A1163	OCH ₂	Н	Н	CF₂H	B24	0
A1164	(CH ₃) ₂ CH ₂ OCH ₂	Н	Н	CF₂H	B24	0
A1165	BrCH ₂	Н	Н	CF₂H	B24	0
A1166	FCH ₂	Н	Н	CF₂H	B24	0
A1167	SCH ₂	Н	Н	CF₂H	B24	0
A1168	N SOCH ₂	Н	Н	CF₂H	B24	0
A1169	N SO ₂ CH ₂	Н	Н	CF₂H	B24	0
A1170	O N SCH ₂	н	Н	CF₂H	B24	0
A1171	N SOCH ₂	Н	Н	CF₂H	B24	0
A1172	SO ₂ CH ₂	Н	Н	CF₂H	B24	0
A1173	cyclopropyl-CH ₂	Н	Н	CF₂H	B24	0
A1174	2,2-dichlorocycloprop-	Н	н	CF₂H	B24	0
	1-yl			_		
A1175	CH₃OC(O)CH=CH	Н	Н	CF₂H	B24	0
A1176	CH ₃ CH ₂ OC(O)CH=CH	Н	Н	CF₂H		0
A1177	CICH₂CH=CH	Н	Н	CF₂H	B24	0
A1178	CH=C=CH	Н	Н	CF₂H	B24	0
A1179	(CH ₃) ₂ NCH ₂	Н	Н	CF₂H	B24	0
A1180	HOCH₂	Н	Н	CF₂H	B24	0
A1181	CH ₃ C(O)OCH ₂	Н	Н	CF₂H	B24	0
A1182	PhC(O)OCH ₂	Н	Н	CF₂H	B24	0

Comp.	R_2	R_3	R_4	R ₅	Q_1	р
No.						
A1183	PhCH₂	Н	н	CF₂H	B24	0
A1184	CH ₃ OC(O)CH ₂	Н	Н	CF₂H	B24	0
A1185	NCCH₂	Н	Н	CF₂H	B24	0
A1186	CH ₃ (CH ₂) ₇ SCH ₂	Н	Н	CF₂H	B24	0
A1187	$CH_3(CH_2)_7SOCH_2$	Н	н	CF₂H	B24	0
A1188	$CH_3(CH_2)_7SO_2CH_2$	Н	Н	CF ₂ H	B24	0
A1189	0	Н	Н	CF₂H	B24	0
A1190	CICH₂CC	Н	Н	CF₂H	B24	0
A1191	Br	Н	Н	CF₂H	B24	0
A1192	CI	Н	Н	CF₂H	B24	0
A1193	CF ₃ SO ₂ O	Н	Н	CF₂H	B24	0
A1194	()	Н	Н	CF₂H	B24	0
A1195	()	Н	Н	CF₂H	B24	0
A1196	()	Н	Н	CF₂H	B24	0
A1197	CH ₂	Н	Н	CF₂H	B24	0
A1198	N CH ₂	Н	Н	CF₂H	B24	0
A1199	CH ₂	Н	Н	CF₂H	B24	0
A1200	CH ₃ ON=CHCH ₂	Н	Н	CF₂H	B24	0
A1201	O=CHCH ₂	Н	Н	CF₂H	B24	0
A1202	CH₃CH=CH	Н	Н	CF ₃	B24	0
A1203	CH₃SO₂NH	Н	Н	CF ₃	B24	0
A1204	CH₃CH₂CH₂O	Н	CH ₃	CF ₃	B24	0
A1205	CI	CH₃	Н	CF ₃	B24	0
A1206	F₂CHO	Н	Н	CF ₃	B24	0
A1207	CH ₃ CH ₂ C(O)OCH ₂	Н	н	CF ₃	B24	0

Comp.	R_2	R_3	R_4	R ₅	Q_1	р
No.						
A1208	CH ₃ CH ₂ OC(O)OCH ₂	н	Н	CF ₃	B24	0
A1209	CH₃OCH₂OCH₂	Н	Н	CF ₃	B24	0
A1210	CH₃	Н	Н	CF ₃	B24	1
A1211	CH₃CH₂	н	н	CF ₃	B24	1
A1212	cyclopropyl	Н	н	CF ₃	B24	1
A1213	$CH_3(CH_2)_2$	Н	н	CF ₃	B24	1
A1214	CH₃OCH₂	Н	н	CF ₃	B24	1
A1215	CF₃	н	н	CF ₃	B24	1
A1216	F₂CH	Н	н	CF ₃	B24	1
A1217	CICH ₂	Н	Н	CF ₃	B24	1
A1218	CH ₃ SO ₂ CH ₂	Н	Н	CF ₃	B24	1
A1219	CH₃	CF₃	Н	CH₃	B24	1
A1220	CH ₃ CH ₂ OCH ₂	Н	Н	CF ₃	B24	1
A1221	PhOCH₂	Н	Н	CF ₃	B24	1
A1222	$(CH_3)_2CH_2OCH_2$	Н	Н	CF ₃	B24	1
A1223	BrCH ₂	Н	Н	CF ₃	B24	1
A1224	FCH ₂	Н	Н	CF ₃	B24	1
A1225	N SO ₂ CH ₂	Н	Н	CF ₃	B24	1
A1226	SO ₂ CH ₂	н	Н	CF ₃	B24	1
A1227	cyclopropyl-CH ₂	Н	н	CF₃	B24	1
A1228	2,2-dichlorocycloprop-	Н	Н	CF₃	B24	1
	1-yl					
A1229	(CH ₃) ₂ NCH ₂	н	н	CF₃	B24	1
A1230	HOCH₂	Н	н	CF ₃	B24	1
A1231	CH₃C(O)OCH₂	н	н	CF ₃	B24	1
A1232	PhC(O)OCH ₂	Н	Н	CF ₃	B24	1
A1233	PhCH₂	Н	Н	CF₃		1
A1234	CH₃OC(O)CH₂	н	Н	CF ₃		1
A1235	NCCH ₂	Н	Н	CF ₃	B24	1

Comp.	R_2	R ₃	R_4	R₅	Q ₁	р
No.						
A1236	CH ₃ (CH ₂) ₇ SO ₂ CH ₂	Н	Н	CF₃	B24	1
A1237	Br	Н	Н	CF₃	B24	1
A1238	CI	Н	Н	CF₃	B24	1
A1239	O=CHCH ₂	Н	Н	CF₃	B24	1
A1240	CH₃	Н	Н	CF ₂ CI	B24	1
A1241	CH₃CH₂	Н	н	CF ₂ CI	B24	1
A1242	cyclopropyl	Н	н	CF ₂ CI	B24	1
A1243	$CH_3(CH_2)_2$	Н	н	CF₂CI	B24	1
A1244	CH₃OCH₂	Н	Н	CF ₂ CI	B24	1
A1245	CF ₃	н	Н	CF ₂ CI	B24	1
A1246	F₂CH	Н	Н	CF₂CI	B24	1
A1247	CICH ₂	Н	Н	CF₂CI	B24	1
A1248	CH ₃ SO ₂ CH ₂	н	Н	CF₂CI	B24	1
A1249	CH ₃	CF ₃	Н	CF ₂ CI	B24	1
A1250	CH ₃ CH ₂ OCH ₂	н	Н	CF ₂ CI	B24	1
A1251	PhOCH ₂	Н	Н	CF ₂ CI	B24	1
A1252	$(CH_3)_2CH_2OCH_2$	Н	Н	CF ₂ Cl	B24	1
A1253	BrCH ₂	Н	Н	CF ₂ CI	B24	1
A1254	FCH₂	Н	Н	CF ₂ CI	B24	1
A1255	N SO ₂ CH ₂	Н	н	CF₂CI	B24	1
A1256	O N SO ₂ CH ₂	Н	н	CF ₂ CI	B24	1
A1257	cyclopropyl-CH ₂	Н	Н	CF ₂ CI	B24	1
A1258	2,2-dichlorocycloprop-	Н	н	CF ₂ Cl	B24	1
	1-yl					
A1259	(CH ₃) ₂ NCH ₂	Н	н	CF ₂ Cl	B24	1
A1260	HOCH₂	Н	н	CF ₂ Cl	B24	1
A1261	CH ₃ C(O)OCH ₂	Н	Н	CF ₂ Cl	B24	1
A1262	PhC(O)OCH ₂	Н	Н	CF ₂ Cl	B24	1
A1263	PhCH₂	Н	Н	CF ₂ CI	B24	1

Comp.	R_2	R ₃	R_4	R_5	Q_1	р
No.						
A1264	CH ₃ OC(O)CH ₂	Н	Н	CF ₂ CI	B24	1
A1265	NCCH₂	Н	Н	CF ₂ CI	B24	1
A1266	$CH_3(CH_2)_7SO_2CH_2$	Н	н	CF ₂ CI	B24	1
A1267	Br	Н	Н	CF ₂ CI	B24	1
A1268	Cl	Н	Н	CF ₂ CI	B24	1
A1269	O=CHCH₂	Н	Н	CF₂CI	B24	1
A1270	CH ₃	Н	Н	CF₂H	B24	1
A1271	CH ₃ CH ₂	н	Н	CF₂H	B24	1
A1272	cyclopropyl	Н	Н	CF₂H	B24	1
A1273	$CH_3(CH_2)_2$	Н	Н	CF₂H	B24	1
A1274	CH₃OCH₂	Н	Н	CF₂H	B24	1
A1275	CF ₃	Н	Н	CF₂H	B24	1
A1276	F ₂ CH	Н	Н	CF₂H	B24	1
A1277	CICH ₂	н	Н	CF₂H	B24	1
A1278	CH ₃ SO ₂ CH ₂	Н	Н	CF₂H	B24	1
A1279	CH ₃	CF ₃	Н	CF₂H	B24	1
A1280	CH ₃ CH ₂ OCH ₂	Н	Н	CF₂H	B24	1
A1281	PhOCH ₂	Н	Н	CF ₂ H	B24	1
A1282	(CH ₃) ₂ CH ₂ OCH ₂	Н	Н	CF ₂ H	B24	1
A1283	BrCH ₂	Н	Н	CF ₂ H	B24	1
A1284	FCH ₂	Н	Н	CF ₂ H	B24	1
A1285	N SO ₂ CH ₂	Н	Н	CF ₂ H	B24	1
	, v					
A1286	O N SO ₂ CH ₂	Н	Н	CF₂H	B24	1
	, i			-		
•	, , , , , , , , , , , , , , , , , , , ,					
A1287	cyclopropyl-CH ₂	Н	Н	CF₂H		1
A1288	2,2-dichlorocycloprop-	Н	Н	CF₂H	B24	1
	1-yl					
A1289	(CH ₃) ₂ NCH ₂	Н	Н	CF₂H	B24	1
A1290	HOCH₂	Н	. H	CF₂H	B24	1
A1291	CH₃C(O)OCH₂	Н	Н	CF₂H	B24	1

Comp.	R_2	R_3	R_4	R_5	Q_1	p
No.						
A1292	PhC(O)OCH ₂	Н	Н	CF₂H	B24	1
A1293	PhCH₂	Н	Н	CF ₂ H	B24	1
A1294	CH ₃ OC(O)CH ₂	Н	Н	CF₂H	B24	1
A1295	NCCH₂	Н	Н	CF ₂ H	B24	1
A1296	CH ₃ (CH ₂) ₇ SO ₂ CH ₂	Н	Н	CF₂H	B24	1
A1297	Br	Н	н	CF₂H	B24	1
A1298	CI	Н	Н	CF₂H	B24	1
A1299	O=CHCH ₂	Н	Н	CF₂H	B24	1
A1300	CH₃	Н	Н	CF ₃ CF ₂	B24	1
A1301	НО	Н	Ph	CF ₃	B24	0
A1302	CH ₃	Н	CH ₂ =CH	CF ₃	B24	0
A1303	CH₃	Н	CH₃CH₂O	CF ₃	B24	0
A1304	НО	CH₃	н	CF ₃	B24	0
A1305	НО	Н	Н	CF ₃	B24	0
A1306	(CH3CH2)2N(O)CO	Н	Н	CF ₃	B24	0
A1307	CH₃	Н	tosyl-O	CF ₃	B24	0
A1308	CH ₃	Н	CH₃CC	CF ₃	B24	0
A1309	CH ₃	Н	HCC	CF ₃	B24	0
A1310	CH ₃	Н	CICH ₂ CC	CF ₃	B24	0
A1311	CH ₃	Н	PhCH ₂ O	CF ₃	B24	0
A1312	CH ₃	Н	CF ₃ SO ₂ O	CF ₃	B24	0
A1313	CH ₃	Н	(CH₃)₂N	CF ₃	B24	0
A1314	CH ₃	Н	CH ₃ C(O)O	CF ₃	B24	0
A1315	CH ₃	Н	CH ₃ CH ₂ C(O)	CF ₃	B24	0
			0			
A1316	CH ₃	Н	PhC(O)O	CF ₃	B24	0
A1317	CH ₃	Н	3-pyridyl	CF ₃	B24	0
A1318	CH3OCH2OCH2	Н	Н	CF ₂ CI	B24	0
A1319	CH₃OCH₂OCH₂	Н	Н	CF₂H	B24	0
A1320	CH3OCH2OCH2	Н	Н	CF ₂ CF ₃	B24	0
A1321	CH3OCH2OCH2	Н	н	CF₃	B24	1
A1322	CH₃O	Н	CH ₃	CF ₃	B24	0

In the formulaic representations of the tables (for example Table 7, compound A 1088, substituent R_2), the linkage site with the pyridine ring is on the right-hand side of the formulaic representation. Terminal valencies are a methyl group.

Table 8: Compounds of the formula lb (p is 0 or 1):

$$CF_3$$
 CH_3 (Ib)

$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_1$	$\underline{\mathbf{Q}}_1$	<u>Q</u> 1	$\underline{\mathbf{Q}}_1$	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_1$	$\underline{\mathbf{Q}}_1$	<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1
B1	B2	В3	B4	B5	B6	B7	B8	B 9	B10	B11	B12
B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23	-
B25	B26	B27	B28	B29	B30	B31	B32	B33	B34	B35	B36
B37	B38	B39	B40	B41	B42	B43	B44	B 45	B46	B47	B48
B49	B50	B51	B52	B53	B54	B55	B56	B57	B58	B59	B60
B61	B62	B63	B64	B6 5	B66	B67	B68	B69	B70	B71	B72
B7 3	B74	B75	B76	B77	B78	B79	B80	B81	B82	B83	B84
B85	B86	B87	B88	B89	B90	B91	B92	B9 3	B94	B95	B96
B97	B98	B99	B100	B101	B102	B103	B104	B105	B106	B107	B108
B109	B110	B111	B112	B113	B114	B115	B116	B117	B118	B119	B120
B121	B122	B123	B124	B125	B126	B127	B128	B129	B130	B131	B132
B133	B134	B135	B136	B137	B138	B139	B140	B141	B142	B143	B144
B145	B146	B147	B148	B149	B150	B151	B152	B153	B154	B155	B156
B157	B158	B159	B160	B161	B162	B163	B164	B165	B166	B167	B168
B169	B170	B171	B172	B173	B174	B 175	B176	B177	B178	B179	B180
B181	B182	B183	B184	B185	B186	B187	B188	B189	B190	B191	B192
B193	B194	B195	B196	B197	B198	B199	B200	B201	B202	B203	B204
B205	B206	B207	B208	B209	B210	B211	B212	B213	B214	B215	B216
B217	B218	B219	B220	B221	B222	B223	B224	B225	B226	B227	B228
B229	B230	B231	B232	B233	B234	B235	B236	B237	B238	B239	B240
B241	B242	B243	B244	B245	B246	B247	B248	B249	B250	B251	B252
B253	B254	B255	B256	B257	B258	B259	B260	B261	B262	B263	B264
B265	B266	B267	B268	B269	B270	B271	B272	B273	B274	B275	B276
B277	B278	B279	B280	B281	B282	B283	B284	B285	B286	B287	B288
B289	B290	B291	B292	B293	B294	B295	B296	B297	B298	B299	B300

$\underline{\mathbf{Q}}_{\underline{1}}$	$\underline{\mathbf{Q}}_{\underline{1}}$	$\underline{\mathbf{Q}_1}$	\underline{Q}_1	<u>Q</u> 1	$\underline{\mathbf{Q}}_1$	$\underline{\mathbf{Q}}_1$	<u>Q</u> 1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	\underline{Q}_1	<u>Q</u> 1
B301	B302	B303	B304	B305	B306	B307	B308	B309	B310	B311	B312
B313	B314	B315	B316	B317	B318	B319	B320	B321	B322	B323	B324
B325	B326	B327	B328	B329	B330	B331	B332	B333	B334	B335	B336
B337	B338	B339	B340	B341	B342	B343	B344	B345	B346	B347	B348
B349	B350	B351	B352	B353	B354	B355	B356	B357	B358	B359	B360
B361	B362	B363	B364	B365	B366	B367	B368	B369	B370	B371	B372
B373	B374	B37 5	B376	B377	B378	B379	B380	B381	B382	B383	B384
B385	B386	B387	B388	B389	B390	B391	B392	B393	B394	B395	B396
B397	B398	B399	B400	B401	B402	B403	B404	B405	B406	B407	B408
B409	B410	B411	B412	B413	B414	B415	B416	B417	B418	B419	B420
B421	B422	B423	B424	B425	B426	B427	B428	B429	B430	B431	B432
B433	B434	B435	B436	B437	B438	B439	B440	B441	B442	B443	B444
B445	B446	B447	B448	B449	B450	B451	B452	B453	B454	B455	B456
B457	B458	B459	B460	B461	B462	B463	B464	B465	B466	B467	B468
B469	B470	B471	B472	B473	B474	B475	B476	B477	B478	B479	B480
B481	B482	B483	B484	B485	B486	B487	B488	B489	B490	B491	B492
B493	B494	B495	B496	B497	B498	B499	B500	B501	B502	B503	B504
B505	B506	B507	B508	B509	B510	B511	B512	B513	B514	B515	B516
B517	B518	B519	B520	B521	B522	B523	B524	B525	B526	B527	B528
B529	B530	B531	B532	B533	B534	B535	B536	B537	B538	B539	B540
B541	B542	B543	B544	B545	B546	B547	B548	B549	B550	B551	B552
B553	B554	B555	B556	B557	B558	B559	B560	B561	B562	B563	B564
B565	B566	B567	B568	B569	B570	B571	B572	B573	B574	B575	B576
B577	B578	B579	B580	B581	B582	B583	B584	B585	B586	B587	B588
B589	B590	B591	B592	B593	B594	B595	B596	B597	B598	B599	B600
B601	B602	B603	B604	B605	B606	B607	B608	B609	B610	B611	B612
B613	B614	B615	B616	B617	B618	B619	B620	B621	B622	B623	B624
B625	B626	B627	B628	B629	B630	B631	B632	B633	B634	B635	B636
B637	B638	B639	B640	B641	B642	B643	B644	B645	B646	B647	B648
B649	B650	B651	B652	B653	B654	B655	B656	B657	B658	B659	B660
B661	B662	B663	B664	B665	B666	B667	B668	B669	B670	B671	B672
B773	B774	B775	B776	B777	B778	B779	B780	B781	B782	B783	B784
B785	B786	B787	B788	B789	B790	B791	B792	B793	B794	B795	B796

\mathbf{Q}_1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}_1}$	\underline{Q}_1	\underline{Q}_1	\underline{Q}_1	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	<u>Q</u> 1
B797	B798	B799	B800	B801	B802	B803	B804	B805	B806	B807	B808
B809	B810	B811	B812	B813	B814	B815	B816	B817	B818	B819	B820
B821	B822	B823	B824	B825	B826	B827	B828	B829	B830	B831	B832
B833	B834	B8 35	B836	B837	B838	B839	B840	B841	B842	B843	B844
B845	B846	B847	B848	B849	B850	B851	B852	B8 53	B854	B855	B856
B857	B858	B859	B860	B861	B862	B863	B864	B865	B866	B867	B868
B869	B870	B871	B872	B873	B874	B875	B87 6	B877	B878	B879	B880
B881	B882	B883	B884	B885	B886	B887	B888	B889	B890	B891	B892
B893	B894	B895	B896	B897	B898	B899	B900	B901	B902	B903	B904
B905	B906	B907	B908	B909	B910	B911	B912	B913	B914	B915	B916
B917	B918	B919	B920	B921	B922	B923	B924	B925	B926	B927	B928
B929	B930	B931	B932	B933	B934	B935	B936	B937	B938	B939	B940
B941	B942	B943	B944	B945	B946	B947	B948	B949	B950	B951	B952
B953	B954	B955	B956	B957	B958	B959	B960	B961	B962	B963	B964
B965	B966	B967	B968	B969	B970	B971	B972	B973	B974	B975	B976
B977	B978	B979	B980	B981	B982	B983	B984	B985	B986	B987	B988
B989	B990	B991	B992	B993	B994	B995	B996	B997	B998	B999	B1000
B1001	B1002	B1003	B1004	B1005	B1006	B1007	B1008	B1009	B1010	B1011	B1012
B1013	B1014	B1015	B1016	B1017	B1018	B1019	B1020	B1021	B1022	B1023	B1024
B1025	B1026	B1027	B1028	B1029	B1030	B1031	B1032	B1033	B1034	B1035	B1036
B1037	B1038	B1039	B1040	B1041	B1042	B1043	B1044	B1045	B1046	B1047	B1048
B1049	B1050	B1051	B1052	B1053	B1054	B1055	B1056	B1057	B1058	B1059	B1060
B1061	B1062	B1063	B1064	B1065	B1066	B1067	B1068	B1069	B1070	B1071	B1072
B1073	B1074	B1075	B1076	B1077	B1078	B1079	B1080	B1081	B1082	B1083	B1084
B1085	B1086	B1087	B1088	B1089	B1090	B1091	B1092	B1093	B1094	B1095	B1096
B1097	B1098	B1099	B1100	B1101	B1102	B1103	B1104	B1105	B1106	B1107	B1108
B1109	B1110	B1111	B1112	B1113	B1114	B1115	B1116	B1117	B1118	B1119	B1120
B1121	B1122	B1123	B1124	B1125	B1126	B1127	B1128	B1129	B1130	B1131	B1132
B1133	B1134	B1135	B1136	B1137	B1138	B1139	B1140	B1141	B1142	B1143	B1144
B1145	B1146	B1147	B1148	B1149	B1150	B1151	B1152	B1153	B1154	B1155	B1156
B1157	B1158	B1159	B1160	B1161	B1162	B1163	B1164	B1165	B1166	B1167	B1168
B1169	B1170	B1171	B1172	B1173	B1174	B1175	B1176	B1177	B1178	B1179	B1180
B1181	B1182	B1183	B1184	B1185	B1186	B1187	B1188	B1189	B1190	B1191	B1192

 Q1
 Q1<

Table 9: Compounds of the formula lc (p is 0 or 1):

$$H_3C$$
 Q_1
 CF_3
 CH_3
 CH_3
 CH_3

$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}_1}$	\underline{Q}_1	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	\underline{Q}_1	\underline{Q}_1	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$
B1	B2	B3	B4	B 5	B6	B7	B8	B9	B10	B11	B12
B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23	-
B25	B26	B27	B28	B29	B30	B31	B32	B3 3	B34	B 35	B36
B37	B38	B39	B40	B41	B42	B43	B44	B45	B46	B47	B48
B49	B50	B51	B52	B53	B54	B5 5	B56	B57	B58	B59	B60
B61	B62	B63	B64	B65	B66	B67	B68	B69	B70	B71	B72
B7 3	B74	B75	B76	B77	B78	B79	B80	B81	B82	B83	B84
B85	B86	B87	B88	B89	B90	B91	B92	B9 3	B94	B 95	B96
B97	B98	B99	B100	B101	B102	B103	B104	B105	B106	B107	B108
B109	B110	B111	B112	B113	B114	B115	B116	B117	B118	B119	B120
B121	B122	B123	B124	B125	B126	B127	B128	B129	B130	B131	B132
B133	B134	B135	B136	B137	B138	B139	B140	B141	B142	B143	B144
B145	B146	B147	B148	B149	B150	B151	B152	B153	B154	B155	B156
B157	B158	B159	B160	B161	B162	B163	B164	B165	B166	B167	B168
B169	B170	B171	B172	B173	B174	B175	B176	B177	B178	B179	B180
B181	B182	B183	B184	B185	B186	B187	B188	B189	B.190	B191	B192
B193	B194	B195	B196	B197	B198	B199	B200	B201	B202	B203	B204
B205	B206	B207	B208	B209	B210	B211	B212	B213	B214	B215	B216
B217	B218	B219	B220	B221	B222	B223	B224	B225	B226	B227	B228
B229	B230	B231	B232	B233	B234	B235	B236	B237	B238	B239	B240
B241	B242	B243	B244	B245	B246	B247	B248	B249	B250	B251	B252

 \mathbf{Q}_1 Q_1 $\mathbf{Q_1}$ Q_1 <u>Q</u>1 Q_1 Q_1 Q_1 Q_1 Q_1 Q_1 Q_1 B253 B254 B255 B256 B257 B258 B259 B260 B261 B262 B263 B264 B267 B265 B266 B268 B270 B269 B271 B273 B272 B274 B275 B276 B277 B278 B279 B280 B281 B282 B283 B284 B285 B286 B287 B288 B289 B290 B291 B292 B293 B294 B295 B296 B297 B298 B299 B300 B301 B302 B303 B304 **B305** B306 B307 B308 B309 B310 B311 B312 B313 B315 B314 B316 B317 B318 B319 B320 B321 B322 B323 **B324** B325 B327 B326 **B328** B329 B330 B331 **B332** B333 B334 B335 B336 **B337** B339 **B338** B340 B341 B342 **B343 B344** B345 **B346** B347 **B348** B349 B350 B351 B352 B353 B354 **B**355 B356 B357 B358 B360 B359 B361 B362 B363 B364 B365 **B366** B367 B369 **B368** B370 B371 B372 **B373** B374 B375 B376 **B377 B378 B379** B380 B381 B382 B384 **B383** B385 **B386 B387 B388** B389 B390 B391 B392 **B393** B394 B395 **B396** B397 **B398** B399 B400 B401 B402 B403 B404 B405 B406 B407 B408 B409 B410 B411 B412 B413 B414 B415 B416 B417 B418 B419 B420 B421 B422 B423 B424 B425 B426 B427 B428 B429 B430 B431 B432 B433 B434 B435 B436 B437 B438 B439 B440 B441 B442 **B444** B443 B445 B446 B447 **B448** B449 B450 B451 B452 B453 B454 B455 B456 B457 B458 B459 B460 B461 B462 B463 **B464** B465 B466 B467 B468 B469 B470 B471 B472 B473 B474 B475 B476 B477 B478 B479 **B480** B481 B482 B483 B484 B485 B486 B487 B488 B489 B490 B491 B492 B493 B494 B495 B496 B497 B499 B498 B500 B501 B502 B503 B504 B505 B506 B507 B508 B514 B509 B510 B511 B512 B513 B515 B516 B517 B518 B519 B520 B521 B522 B523 B524 B525 B526 B527 B528 B529 B530 B531 B532 B535 B533 B534 B536 B537 B538 B539 B540 B541 B542 B543 **B544** B545 **B546** B547 **B548** B549 B550 B551 B552 B553 B554 B555 B556 B557 B558 B559 B560 B561 B562 B563 **B564** B565 B566 B567 B568 **B569** B570 B571 B572 B573 B574 B575 **B576** B577 **B578** B579 B580 B581 B582 B583 B584 B585 B586 B587 **B588** B589 B590 B592 B591 B593 B594 B595 B596 B597 B598 B599 B600 B601 B602 B603 B604 B605 B606 B607 B608 B609 B610 B611 B612 B613 B614 B615 B616 B617 B618 B619 B620 B621 B622 B623 B624 B625 B626 B627 B628 B629 B630 B631 B632 B633 B634 B635 B636 B637 B638 B639 B640 B641 B642 B643 B644 B645 B646 B647 **B648**

 \mathbf{Q}_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 **Q**₁ Q_1 \mathbf{Q}_1 Q_1 B649 B650 B651 B652 B653 B654 B655 B656 B657 B658 B659 B660 B661 B662 B663 B664 B665 B666 B667 B668 B669 B670 B671 B672 B773 B774 B775 B776 B777 B778 B779 B780 B781 B782 B783 B784 B785 B788 B786 B787 B789 B790 B791 B792 B793 B794 B796 B795 B797 B798 B799 B800 B801 B803 B802 B804 B805 B806 B807 **B808** B809 B810 B811 B812 B813 B814 B815 B816 B818 B817 B819 B820 B821 B822 B823 B824 B825 B826 B827 B828 B829 B830 B831 B832 B833 B834 B836 B837 B835 B838 B839 B840 B842 B841 B843 B844 B845 B846 B847 B848 B849 B850 B851 B852 B853 B854 B855 B856 B857 B858 B860 B859 B861 B862 B863 B864 B865 B866 B867 B868 B869 B870 B871 B872 B873 B874 B875 B876 B877 B878 B879 B880 B881 B882 B883 B884 B885 B887 B886 B888 B889 B890 B891 B892 B893 B894 B896 B895 B897 B898 B899 B900 B901 B902 B903 B904 B905 B906 B907 B908 B909 B910 B911 B912 B913 B914 B915 B916 B917 B918 B920 B921 B919 B922 B923 B924 B925 B926 B927 B928 B929 B930 B932 B933 B931 B934 B935 B936 B937 B938 B939 B940 B941 B942 B943 B944 B945 B947 B946 B948 B949 B950 B951 B952 B953 B954 B955 B956 B957 B958 B959 B960 B961 B962 B963 B964 B965 B966 B967 B968 B969 B970 B971 B972 B973 B974 B975 B976 B977 B978 B979 B980 B981 B982 B983 B984 B985 B986 B987 B988 B989 B990 B991 B992 B993 B994 B995 B996 B997 B998 B999 B1000 B1001 B1002 B1003 B1004 B1005 B1006 B1007 B1008 B1009 B1010 B1011 B1012 B1013 B1014 B1015 B1016 B1017 B1018 B1019 B1020 B1021 B1022 B1023 B1024 B1025 B1026 B1027 B1028 B1029 B1030 B1031 B1032 B1033 B1034 B1035 B1036 B1037 B1038 B1039 B1040 B1041 B1042 B1043 B1044 B1045 B1046 B1047 B1048 B1049 B1050 B1051 B1052 B1053 B1054 B1055 B1056 B1057 B1058 B1059 B1060 B1061 B1062 B1063 B1064 B1065 B1066 B1067 B1068 B1069 B1070 B1071 B1072 B1073 B1074 B1075 B1076 B1077 B1078 B1079 B1080 B1081 B1082 B1083 B1084 B1085 B1086 B1087 B1088 B1089 B1090 B1091 B1092 B1093 B1094 B1095 B1096 B1097 B1098 B1099 B1100 B1101 B1102 B1103 B1104 B1105 B1106 B1107 B1108 B1109 B1110 B1111 B1112 B1113 B1114 B1115 B1116 B1117 B1118 B1119 B1120 B1121 B1122 B1123 B1124 B1125 B1126 B1127 B1128 B1129 B1130 B1131 B1132 B1133 B1134 B1135 B1136 B1137 B1138 B1139 B1140 B1141 B1142 B1143 B1144

 Q_1 \mathbf{Q}_1 Q_1 $\mathbf{Q_1}$ Q_1 \mathbf{Q}_1 \mathbf{Q}_1 Q_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 B1145 B1146 B1147 B1148 B1149 B1150 B1151 B1152 B1153 B1154 B1155 B1156 B1157 B1158 B1159 B1160 B1161 B1162 B1163 B1164 B1165 B1166 B1167 B1168 B1169 B1170 B1171 B1172 B1173 B1174 B1175 B1176 B1177 B1178 B1179 B1180 B1181 B1182 B1183 B1184 B1185 B1186 B1187 B1188 B1189 B1190 B1191 B1192 B1193 B1194 B1195 B1196 B1197 B1198 B1199 B1200 B1201 B1202 B1203 B1204 B1205 B1206 B1207 B1208 B1209 B1210 B1211 B1212 B1213 B1214 B1215 B1216 B1217

Table 10: Compounds of the formula Id (p is 0 or 1):

$$CF_3$$
 CH_2CH_3
 CH_2CH_3

<u>Q</u>₁ Q_1 Q_1 $\mathbf{Q_1}$ \mathbf{Q}_1 $\mathbf{Q_1}$ \mathbf{Q}_1 <u>Q</u>1 Q_1 Q_1 \mathbf{Q}_1 Q_1 B1 B2 B3 B4 **B**5 **B**6 B7 **B8** B9 B10 B11 B12 **B13** B14 B15 **B16** B17 **B**18 B19 B20 B21 B22 B23 -**B25** B26 B27 **B28** B29 B30 B31 B32 **B33** B34 B35 **B36 B37 B38 B39 B40** B41 B42 B43 **B44 B45** B46 B47 **B48** B49 B50 B51 B52 B53 B54 B55 B56 **B57** B58 B59 **B60** B61 B62 B63 **B64** B65 B66 B67 B68 **B69** B70 B71 B72 **B73** B74 **B7**5 **B76** B77 B78 B79 B80 B81 B82 B83 **B84 B85** B86 B87 **B88** B89 B90 B91 B92 B93 B94 B95 B96 **B97** B98 B99 B100 B101 B102 B103 B104 B105 B106 B107 B108 B109 B110 B111 B112 B114 B113 B115 B116 B117 B118 B119 B120 B121 B122 B123 B124 B125 B126 B127 B128 B129 B130 B131 B132 B133 B134 B135 B136 B137 B138 B139 B140 B141 B143 B142 B144 B145 B146 B147 B148 B149 B150 B151 B152 B153 B154 B155 B156 B157 B158 B159 B160 B161 B162 B163 B164 B165 B166 B167 B168 B169 B170 B171 B172 B173 B174 B175 B176 B177 B178 B179 B180 B181 B182 B183 B184 B185 B186 B187 B188 B189 B190 B191 B192 B193 B194 B195 B196 B197 B198 B199 B200 B201 B202 B203 B204

 Q_1 Q_1 Q_1 Q_1 Q_1 \underline{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 $\mathbf{Q_1}$ \mathbf{Q}_1 Q_1 Q_1 B205 B206 B207 B208 B209 B210 B211 B212 B213 B214 B215 B216 B217 B218 B219 B220 B221 B222 B223 B224 B225 B226 B227 **B228** B229 B230 B231 B232 B233 B234 B235 B236 B237 B238 B239 B240 B241 B242 **B244** B243 B245 B247 B246 B248 B249 B250 B251 B252 B253 B254 B255 B256 B257 B258 B259 B260 B261 B262 B263 B264 B265 **B266** B267 B268 B269 B270 B271 B272 B273 B274 B275 B276 B277 **B278 B279** B280 B281 B282 **B283** B284 B285 B286 B287 **B288** B289 B290 B291 B292 B293 B294 B295 B296 B297 B298 B299 B300 B301 B302 B303 B304 B305 B306 B307 B308 B309 B310 B311 B312 B313 B314 B315 B316 **B317 B319** B318 B320 B321 B322 **B323** B324 **B325 B326 B327 B328** B329 B331 B330 B332 **B333 B334** B335 B336 **B337 B338** B340 **B341** B339 B342 **B343 B344 B345** B346 **B347 B348 B349** B350 B351 B352 B353 B354 **B355 B356** B357 B358 B359 B360 **B361** B362 B363 B364 **B365 B366 B367 B368 B369** B370 B371 B372 B373 **B374** B375 **B376** B377 **B378** B379 **B380 B381** B382 **B383 B384 B385 B386 B387 B388 B389** B390 B391 B392 **B393** B394 B395 **B396 B397 B398** B403 B399 B400 B401 B402 B404 B405 B406 B407 **B408** B409 B410 B411 B412 B413 B414 B415 B416 B418 B419 B417 B420 B421 B422 B431 B423 B424 B425 B426 B427 B428 B429 B430 B432 B433 B434 B435 B436 B437 B438 B439 B440 B441 B442 B443 **B444** B445 **B446** B447 **B448** B449 B450 B451 B452 B454 B453 B455 B456 B457 B458 B459 B460 B461 B462 B463 B464 B465 **B466** B467 **B468** B469 B470 B471 B472 B473 B474 B475 B476 B477 **B478** B479 B480 B481 B482 B483 B484 B485 B486 B487 B488 B489 B490 B491 B492 B493 B494 B495 B496 B497 B498 B499 B500 B501 B502 B503 B504 B505 B506 B507 B508 B509 B510 B511 B512 B513 B514 B515 B516 B517 **B518** B519 B520 B521 B522 B523 B524 B525 B526 B527 B528 B529 B530 B531 B532 B533 B534 B535 B536 B537 B538 B539 B540 B541 B542 **B544** B545 B543 B546 B547 **B548** B549 B550 B551 B552 B553 B554 B555 B556 B557 B558 B559 B560 B561 B563 B562 B564 B565 **B566** B567 B568 B569 B570 B571 B572 B573 B574 B575 B576 B577 **B578** B579 B580 B581 B582 B583 B584 B585 B586 B587 B588 B590 B589 B592 B591 B593 B594 B595 B596 B597 B598 B599 B600

 \mathbf{Q}_1 Q_1 Q_1 \mathbf{Q}_1 \mathbf{Q}_1 $\mathbf{Q_1}$ Q_1 Q_1 \mathbf{Q}_1 $\mathbf{Q_1}$ Q_1 Q_1 B601 B602 B603 B604 B605 B606 B607 B608 B609 B610 B611 B612 B613 B614 B615 B616 B617 B618 B619 B620 B621 B622 B623 B624 B626 B625 B627 B628 B629 B630 B631 B632 B633 B634 B635 B636 B637 B638 B639 B640 B641 B642 B643 B644 B645 B646 B647 B648 B649 B650 B651 B652 B653 B654 B655 B656 B657 B658 B659 B660 B661 B662 B663 B664 B665 B666 B667 B668 B669 B670 B671 B672 B773 B774 B775 B776 **B777** B778 B779 B780 B781 B782 B783 **B784** B785 B786 B787 B788 B789 B790 B792 B793 B791 B794 B795 B796 B797 B798 B799 B800 B801 B802 B804 B805 B803 B806 B807 B808 B810 B809 B811 B813 B812 B814 B815 B816 B817 B818 B819 B820 B821 B822 B823 B825 B824 B826 B827 B828 B829 B830 B831 B832 B834 B833 B835 B836 B837 B838 B839 B840 B841 B842 B843 **B844** B845 B846 B847 B848 B849 B850 B851 B852 B853 B854 B855 B856 B857 B858 B859 B860 B861 B862 B863 B864 B865 B866 B867 B868 **B869** B870 B871 B874 B873 B872 B875 B876 B877 B878 B879 B880 B881 B882 B883 B884 B885 B886 B887 B888 B889 B890 B891 B892 B894 B893 B895 B897 B896 B898 B899 B900 B901 B902 B903 B904 B905 B906 B907 B908 B909 B910 B911 B912 B913 B914 B915 B916 B917 B918 B919 B920 B921 B922 B923 B924 B925 B926 B927 B928 B929 B930 B931 B932 B933 B934 B935 B936 B937 B938 B939 B940 B941 B942 B943 B944 B945 B946 B947 B948 B949 B950 B951 B952 B953 B954 B955 B956 B957 B958 B959 B960 B961 B962 B963 B964 B965 B966 B967 B968 B969 B970 B971 B972 B973 B974 B975 B976 B977 B978 B979 B980 B981 B982 B983 B984 B985 B986 B987 **B988** B989 B990 B991 B992 B993 B994 B995 B996 B997 B998 B999 B1000 B1001 B1002 B1003 B1004 B1005 B1006 B1007 B1008 B1009 B1010 B1011 B1012 B1013 B1014 B1015 B1016 B1017 B1018 B1019 B1020 B1021 B1022 B1023 B1024 B1025 B1026 B1027 B1028 B1029 B1030 B1031 B1032 B1033 B1034 B1035 B1036 B1037 B1038 B1039 B1040 B1041 B1042 B1043 B1044 B1045 B1046 B1047 B1048 B1049 B1050 B1051 B1052 B1053 B1054 B1055 B1056 B1057 B1058 B1059 B1060 B1061 B1062 B1063 B1064 B1065 B1066 B1067 B1068 B1069 B1070 B1071 B1072 B1073 B1074 B1075 B1076 B1077 B1078 B1079 B1080 B1081 B1082 B1083 B1084 B1085 B1086 B1087 B1088 B1089 B1090 B1091 B1092 B1093 B1094 B1095 B1096

 \mathbf{Q}_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 Q_1 Q_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 \mathbf{Q}_1 B1097 B1098 B1099 B1100 B1101 B1102 B1103 B1104 B1105 B1106 B1107 B1108 B1109 B1110 B1111 B1112 B1113 B1114 B1115 B1116 B1117 B1118 B1119 B1120 B1121 B1122 B1123 B1124 B1125 B1126 B1127 B1128 B1129 B1130 B1131 B1132 B1133 B1134 B1135 B1136 B1137 B1138 B1139 B1140 B1141 B1142 B1143 B1144 B1145 B1146 B1147 B1148 B1149 B1150 B1151 B1152 B1153 B1154 B1155 B1156 B1157 B1158 B1159 B1160 B1161 B1162 B1163 B1164 B1165 B1166 B1167 B1168 B1169 B1170 B1171 B1172 B1173 B1174 B1175 B1176 B1177 B1178 B1179 B1180 B1181 B1182 B1183 B1184 B1185 B1186 B1187 B1188 B1189 B1190 B1191 B1192 B1193 B1194 B1195 B1196 B1197 B1198 B1199 B1200 B1201 B1202 B1203 B1204 B1205 B1206 B1207 B1208 B1209 B1210 B1211 B1212 B1213 B1214 B1215 B1216 B1217

Table 11: Compounds of the formula le (p is 0 or 1):

$$CCI_3$$
 N
 CH_3
 (Ie)

 Q_1 \mathbf{Q}_1 <u>Q</u>1 Q_1 <u>Q</u>₁ <u>Q</u>₁ Q_1 Q_1 \mathbf{Q}_1 $\mathbf{Q_1}$ <u>Q</u>1 $\mathbf{Q_1}$ B1 **B**2 **B**3 B4 B5 B6 B7 B8 B9 B10 B11 **B12** B13 B14 B15 B16 **B17** B18 **B**19 B20 B21 B22 B23 -B25 **B26 B27 B28** B29 B30 B31 B32 B33 B34 **B35 B36** B37 **B38 B39** B40 B41 B42 B43 **B44** B45 B46 **B48** B47 B49 **B50** B51 B52 B53 B54 B55 B56 B57 **B**58 **B**59 B60 B61 B62 B63 B64 B65 B66 **B67** B68 B69 B70 B72 B71 B73 **B74** B75 B76 B77 B78 **B79** B80 B81 B82 **B83 B84** B85 **B86 B87** B88 B89 B90 B91 B92 **B93** B94 B95 B96 B97 **B98** B99 B100 B101 B102 B103 B104 B105 B106 B107 B108 B109 B110 B111 B112 B113 B114 B115 B116 B117 B118 B119 B120 B121 B124 B122 B123 B125 B126 B127 B128 B129 B130 B131 B132 B133 B134 B135 B136 B137 B138 B139 B140 B141 B142 B143 B144 B145 B146 B147 B148 B149 B150 B151 B152 B153 B154 B155 B156

 Q_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 Q_1 Q_1 Q_1 Q_1 Q_1 Q_1 $\mathbf{Q_1}$ B157 B158 B159 B160 B161 B162 B163 B164 B165 **B166** B167 **B168** B169 B170 B171 B172 B173 B174 B175 B176 B177 B178 B179 B180 B181 B182 B183 B184 B185 B186 B187 B188 B189 B190 B191 B192 B193 B194 B195 B196 B197 B198 B199 B200 B201 B202 B203 B204 B205 B206 B207 B208 B209 B210 B211 B212 B213 B214 B215 B216 B217 B218 B219 B220 B221 B222 B223 B224 B225 B226 B227 B228 B229 B230 B231 B232 B233 B234 **B235** B236 B237 B238 B239 B240 B242 B241 B243 **B244** B245 B246 B247 B248 B249 B250 B251 B252 B258 B253 B254 B255 B256 B257 B259 B260 B262 B261 B263 B264 B266 B267 B271 B265 B268 B269 B270 B272 B273 B274 B275 B276 B277 B278 B279 B280 B281 B282 B283 B284 B285 **B286** B287 B288 B289 B290 B291 B292 B293 B294 B295 B296 B297 B298 B299 B300 B301 B302 B303 B304 B305 B306 B307 B308 B309 B310 B311 B312 B313 B314 B315 B316 B317 **B318** B319 B320 B321 B322 **B323 B324** B325 B326 B327 **B328** B329 B330 **B331** B332 **B333** B334 B335 **B336** B337 **B338 B339** B340 B345 B341 B342 B343 B344 B346 B347 **B348 B349** B350 B351 B352 B353 B354 **B**355 B356 **B357 B358** B359 **B360** B361 B362 **B363 B364** B365 B366 B367 **B368 B369** B370 B371 B372 **B373** B374 **B375** B376 **B377 B378 B379** B380 B381 B382 B383 **B384 B385 B386 B387 B388** B389 B390 B391 B392 B393 B394 B395 **B396** B397 **B398** B399 B400 B401 B402 B403 B404 B405 B406 B407 B408 B409 B410 B411 B412 B413 B414 B415 B416 B417 B418 B419 B420 B421 B422 B423 B424 B425 B426 B427 B428 B429 B430 B431 B432 B433 B434 B435 B436 B437 B438 B439 B440 B441 B442 B443 **B444** B445 **B446** B447 **B448 B449** B450 B451 B452 B453 B454 B455 B456 B457 B458 B459 B460 B461 B462 B463 B464 B465 B466 B467 B468 **B469** B470 B471 B472 B473 **B474** B475 B476 B477 **B478** B479 B480 B481 B482 B483 B484 B485 B486 B487 **B488** B489 B490 B491 B492 B493 B494 B495 B496 B497 B498 B499 B500 B501 B502 B503 B504 B505 B506 B507 B508 B509 B510 B511 B512 B513 B514 B515 B516 B517 B518 B519 B520 B521 B522 B523 B524 B525 B526 B527 B528 B529 B530 B531 B532 B533 B534 B535 B536 B537 B538 B539 **B540** B543 B541 B542 **B544** B545 B546 **B547** B548 B549 B550 B551 B552

<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1	\mathbf{Q}_1	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	$\underline{\mathbf{Q}}_1$	$\underline{\mathbf{Q}}_1$	\mathbf{Q}_1	<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1
B553	B554	B555	B556	B557	B558	B559	B560	B561	B562	B563	B564
B565	B566	B567	B568	B569	B570	B571	B572	B573	B574	B575	B576
B577	B578	B579	B580	B581	B582	B583	B584	B585	B586	B587	B588
B589	B590	B591	B592	B593	B594	B595	B596	B597	B598	B599	B600
B601	B602	B603	B604	B605	B606	B607	B608	B609	B610	B611	B612
B613	B614	B615	B616	B617	B618	B619	B620	B621	B622	B623	B624
B625	B626	B627	B628	B629	B630	B631	B632	B633	B634	B635	B636
B637	B638	B639	B640	B641	B642	B643	B644	B645	B646	B647	B648
B649	B650	B651	B652	B653	B654	B655	B656	B657	B658	B659	B660
B661	B662	B663	B664	B665	B666	B667	B668	B669	B670	B671	B672
B773	B774	B775	B776	B777	B778	B779	B780	B781	B782	B783	B784
B785	B786	B787	B788	B789	B790	B791	B792	B793	B794	B795	B796
B797	B798	B799	B800	B801	B802	B803	B804	B805	B806	B807	B808
B809	B810	B811	B812	B813	B814	B815	B816	B817	B818	B819	B820
B821	B822	B823	B824	B825	B826	B827	B828	B829	B830	B831	B832
B833	B834	B835	B836	B837	B838	B839	B840	B841	B842	B843	B844
B845	B846	B847	B848	B849	B850	B851	B852	B853	B854	B855	B856
B857	B858	B859	B860	B861	B862	B863	B864	B865	B866	B867	B868
B869	B870	B871	B872	B873	B874	B875	B876	B877	B878	B879	B880
B881	B882	B883	B884	B885	B886	B887	B888	B889	B890	B891	B892
B893	B894	B895	B896	B897	B898	B899	B900	B901	B902	B903	B904
B90 5	B906	B907	B908	B909	B910	B911	B912	B913	B914	B915	B916
B917	B918	B919	B920	B921	B922	B923	B924	B925	B926	B927	B928
B929	B930	B931	B932	B933	B934	B935	B936	B937	B938	B939	B940
B941	B942	B943	B944	B945	B946	B947	B948	B949	B950	B951	B952
B953	B954	B955	B956	B957	B958	B959	B960	B961	B962	B963	B964
B965	B966	B967	B968	B969	B970	B971	B972	B973	B974	B975	B976
B977	B978	B979	B980	B981	B982	B983	B984	B985	B986	B987	B988
B989	B990	B991	B992	B993	B994	B995	B996	B997	B998	B999	B1000
B1001	B1002	B1003	B1004	B1005	B1006	B1007	B1008	B1009	B1010	B1011	B1012
B1013	B1014	B1015	B1016	B1017	B1018	B1019	B1020	B1021	B1022	B1023	B1024
B1025	B1026	B1027	B1028	B1029	B1030	B1031	B1032	B1033	B1034	B1035	B1036
B1037	B1038	B1039	B1040	B1041	B1042	B1043	B1044	B1045	B1046	B1047	B1048

 Q_1 \mathbf{Q}_1 Q_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 Q_1 B1049 B1050 B1051 B1052 B1053 B1054 B1055 B1056 B1057 B1058 B1059 B1060 B1061 B1062 B1063 B1064 B1065 B1066 B1067 B1068 B1069 B1070 B1071 B1072 B1073 B1074 B1075 B1076 B1077 B1078 B1079 B1080 B1081 B1082 B1083 B1084 B1085 B1086 B1087 B1088 B1089 B1090 B1091 B1092 B1093 B1094 B1095 B1096 B1097 B1098 B1099 B1100 B1101 B1102 B1103 B1104 B1105 B1106 B1107 B1108 B1109 B1110 B1111 B1112 B1113 B1114 B1115 B1116 B1117 B1118 B1119 B1120 B1121 B1122 B1123 B1124 B1125 B1126 B1127 B1128 B1129 B1130 B1131 B1132 B1133 B1134 B1135 B1136 B1137 B1138 B1139 B1140 B1141 B1142 B1143 B1144 B1145 B1146 B1147 B1148 B1149 B1150 B1151 B1152 B1153 B1154 B1155 B1156 B1157 B1158 B1159 B1160 B1161 B1162 B1163 B1164 B1165 B1166 B1167 B1168 B1169 B1170 B1171 B1172 B1173 B1174 B1175 B1176 B1177 B1178 B1179 B1180 B1181 B1182 B1183 B1184 B1185 B1186 B1187 B1188 B1189 B1190 B1191 B1192 B1193 B1194 B1195 B1196 B1197 B1198 B1199 B1200 B1201 B1202 B1203 B1204 B1205 B1206 B1207 B1208 B1209 B1210 B1211 B1212 B1213 B1214 B1215 B1216 B1217

Table 12: Compounds of the formula If:

$$F_2CIC \xrightarrow{N} CH_3 (If)$$

 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 Q_1 \mathbf{Q}_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 \mathbf{Q}_1 B1 B2 **B**3 B4 B5 B6 **B**7 B8 B9 B10 B11 B12 B13 **B14 B15 B**16 B17 B18 B19 **B20** B22 B21 **B23 B25 B26** B27 **B28** B29 B30 B31 **B32 B33 B34 B**35 **B**36 **B37 B38 B39** B40 B41 B42 **B43 B44** B45 B46 B47 **B48** B49 **B50** B51 B52 **B**53 B54 B55 **B56 B57** B58 **B**59 B60 B61 B62 B63 B64 **B65** B66 B67 **B68** B70 B69 B71 B72 **B73** B74 B75 **B**76 **B77 B78 B**79 **B80** B81 B82 **B83 B84 B85 B86 B87 B88 B89** B90 B91 **B92** B93 B94 **B95** B96 **B97 B98** B99 B100 B101 B102 B103 B104 B105 B106 B107 B108

$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	Q_1	Q_1	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	\underline{Q}_1	\underline{Q}_1	\underline{Q}_1	<u>Q</u> 1	<u>Q</u> 1
B109	B110	B111	B112	B113	B114	B115	B116	B117	B118	B119	B120
B121	B122	B123	B124	B125	B126	B127	B128	B129	B130	B131	B132
B133	B134	B135	B136	B137	B138	B139	B140	B141	B142	B143	B144
B145	B146	B147	B148	B149	B150	B151	B152	B153	B154	B155	B156
B157	B158	B159	B160	B161	B162	B163	B164	B165	B166	B167	B168
B169	B170	B171	B172	B173	B174	B175	B176	B177	B178	B179	B180
B181	B182	B183	B184	B185	B186	B187	B188	B189	B190	B191	B192
B193	B194	B195	B196	B197	B198	B199	B200	B201	B202	B203	B204
B205	B206	B207	B208	B209	B210	B211	B212	B213	B214	B215	B216
B217	B218	B219	B220	B221	B222	B223	B224	B225	B226	B227	B228
B229	B230	B231	B232	B233	B234	B235	B236	B237	B238	B239	B240
B241	B242	B243	B244	B245	B246	B247	B248	B249	B250	B251	B252
B253	B254	B255	B256	B257	B258	B259	B260	B261	B262	B263	B264
B265	B266	B267	B268	B269	B270	B271	B272	B273	B274	B275	B276
B277	B278	B279	B280	B281	B282	B283	B284	B285	B286	B287	B288
B289	B290	B291	B292	B293	B294	B295	B296	B297	B298	B299	B300
B301	B302	B303	B304	B305	B306	B307	B308	B309	B310	B311	B312
B313	B314	B315	B316	B317	B318	B319	B320	B321	B322	B323	B324
B325	B326	B327	B328	B329	B330	B331	B332	B333	B334	B335	B336
B337	B338	B339	B340	B341	B342	B343	B344	B345	B346	B347	B348
B349	B350	B351	B352	B353	B354	B355	B356	B357	B358	B359	B360
B361	B362	B363	B364	B365	B366	B367	B368	B369	B370	B371	B372
B373	B374	B375	B376	B377	B378	B379	B380	B381	B382	B383	B384
B385	B386	B387	B388	B389	B390	B391	B392	B393	B394	B395	B396
B397	B398	B399	B400	B401	B402	B403	B404	B405	B406	B407	B408
B409	B410	B411	B412	B413	B414	B415	B416	B417	B418	B419	B420
B421	B422	B423	B424	B425	B426	B427	B428	B429	B430	B431	B432
B433	B434	B435	B436	B437	B438	B439	B440	B441	B442	B443	B444
B445	B446	B447	B448	B449	B450	B451	B452	B453	B454	B455	B456
B457	B458	B459	B460	B461	B462	B463	B464	B465	B466	B467	B468
B469	B470	B471	B472	B473	B474	B475	B476	B477	B478	B479	B480
B481	B482	B483	B484	B485	B486	B487	B488	B489	B490	B491	B492
B493	B494	B495	B496	B497	B498	B499	B500	B501	B502	B503	B504

$\underline{\mathbf{Q}}_{\underline{1}}$	\underline{Q}_1	\underline{Q}_1	\underline{Q}_1	\underline{Q}_1	$\underline{\mathbf{Q}}_1$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	<u>Q</u> 1	$\underline{\mathbf{Q}}_1$	\underline{Q}_1
B505	B506	B507	B508	B509	B510	B511	B512	B513	B514	B515	B516
B517	B518	B519	B520	B521	B522	B523	B524	B525	B526	B527	B528
B529	B530	B531	B532	B533	B534	B535	B536	B537	B538	B539	B540
B541	B542	B543	B544	B545	B546	B547	B548	B549	B550	B551	B552
B553	B554	B555	B556	B557	B558	B559	B560	B561	B562	B563	B564
B565	B566	B567	B568	B569	B570	B571	B572	B573	B574	B575	B576
B577	B578	B579	B580	B581	B582	B583	B584	B585	B586	B587	B588
B589	B590	B591	B592	B593	B594	B595	B596	B597	B598	B599	B600
B601	B602	B603	B604	B605	B606	B607	B608	B609	B610	B611	B612
B613	B614	B615	B616	B617	B618	B619	B620	B621	B622	B623	B624
B625	B626	B627	B628	B629	B630	B631	B632	B633	B634	B635	B636
B637	B638	B639	B640	B641	B642	B643	B644	B645	B646	B647	B648
B649	B650	B651	B652	B653	B654	B655	B656	B657	B658	B659	B660
B661	B662	B663	B664	B665	B666	B667	B668	B669	B670	B671	B672
B773	B774	B775	B776	B777	B778	B779	B780	B781	B782	B783	B784
B785	B786	B 7 87	B788	B789	B790	B791	B792	B793	B794	B795	B796
B797	B798	B799	B800	B801	B802	B803	B804	B805	B806	B807	B808
B809	B810	B811	B812	B813	B814	B815	B816	B817	B818	B819	B820
B821	B822	B823	B824	B825	B826	B827	B828	B829	B830	B831	B832
B833	B834	B835	B836	B837	B838	B839	B840	B841	B842	B843	B844
B845	B846	B847	B848	B849	B850	B851	B852	B853	B854	B855	B856
B857	B858	B859	B860	B861	B862	B863	B864	B865	B866	B867	B868
B869	B870	B871	B872	B873	B874	B875	B876	B877	B878	B879	B880
B881	B882	B883	B884	B885	B886	B887	B888	B889	B890	B891	B892
B893	B894	B895	B896	B897	B898	B899	B900	B901	B902	B903	B904
B905	B906	B907	B908	B909	B910	B911	B912	B913	B914	B915	B916
B917	B918	B919	B920	B921	B922	B923	B924	B925	B926	B927	B928
B929	B930	B931	B932	B933	B934	B935	B936	B937	B938	B939	B940
B941	B942	B943	B944	B945	B946	B947	B948	B949	B950	B951	B952
B953	B954	B955	B956	B957	B958	B959	B960	B961	B962	B963	B964
B965	B966	B967	B968	B969	B970	B971	B972	B973	B974	B975	B976
B977	B978	B979	B980	B981	B982	B983	B984	B985	B986	B987	B988
B989	B990	B991	B992	B993	B994	B995	B996	B997	B998	B999	B1000

 Q_1 <u>Q</u>1 Q_1 \mathbf{Q}_1 Q_1 \mathbf{Q}_1 \mathbf{Q}_1 Q_1 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 B1001 B1002 B1003 B1004 B1005 B1006 B1007 B1008 B1009 B1010 B1011 B1012 B1013 B1014 B1015 B1016 B1017 B1018 B1019 B1020 B1021 B1022 B1023 B1024 B1025 B1026 B1027 B1028 B1029 B1030 B1031 B1032 B1033 B1034 B1035 B1036 B1037 B1038 B1039 B1040 B1041 B1042 B1043 B1044 B1045 B1046 B1047 B1048 B1049 B1050 B1051 B1052 B1053 B1054 B1055 B1056 B1057 B1058 B1059 B1060 B1061 B1062 B1063 B1064 B1065 B1066 B1067 B1068 B1069 B1070 B1071 B1072 B1073 B1074 B1075 B1076 B1077 B1078 B1079 B1080 B1081 B1082 B1083 B1084 B1085 B1086 B1087 B1088 B1089 B1090 B1091 B1092 B1093 B1094 B1095 B1096 B1097 B1098 B1099 B1100 B1101 B1102 B1103 B1104 B1105 B1106 B1107 B1108 B1109 B1110 B1111 B1112 B1113 B1114 B1115 B1116 B1117 B1118 B1119 B1120 B1121 B1122 B1123 B1124 B1125 B1126 B1127 B1128 B1129 B1130 B1131 B1132 B1133 B1134 B1135 B1136 B1137 B1138 B1139 B1140 B1141 B1142 B1143 B1144 B1145 B1146 B1147 B1148 B1149 B1150 B1151 B1152 B1153 B1154 B1155 B1156 B1157 B1158 B1159 B1160 B1161 B1162 B1163 B1164 B1165 B1166 B1167 B1168 B1169 B1170 B1171 B1172 B1173 B1174 B1175 B1176 B1177 B1178 B1179 B1180 B1181 B1182 B1183 B1184 B1185 B1186 B1187 B1188 B1189 B1190 B1191 B1192 B1193 B1194 B1195 B1196 B1197 B1198 B1199 B1200 B1201 B1202 B1203 B1204 B1205 B1206 B1207 B1208 B1209 B1210 B1211 B1212 B1213 B1214 B1215 B1216 B1217

Table 13: Compounds of the formula Ig (p is 0 or 1):

\underline{Q}_1	<u>Q</u> 1	$\underline{\mathbf{Q}_1}$	$\underline{\mathbf{Q}}_{\underline{1}}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	\underline{Q}_1	\underline{Q}_1	$\underline{\mathbf{Q}_1}$
B1	B2	B3	B4	B5	B 6	B7	B8	B 9	B1.0	B11	B12
B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23	-
B25	B 26	B27	B28	B29	B30	B31	B32	B33	B34	B35	B36
B37	B38	B39	B40	B41	B42	B43	B44	B45	B46	B47	B48
B49	B50	B51	B52	B 53	B54	B55	B56	B57	B58	B59	B60
B61	B62	B63	B64	B65	B66	B67	B68	B69	B70	B71	B72

$\underline{\mathbf{Q}_1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	\underline{Q}_1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	\underline{Q}_1	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$
B7 3	B74	B75	B76	B77	B78	B79	B80	B81	B82	B83	B84
B85	B86	B87	B88	B89	B90	B91	B92	B93	B94	B95	B96
B97	B98	B99	B100	B101	B102	B103	B104	B105	B106	B107	B108
B109	B110	B111	B112	B113	B114	B115	B116	B117	B118	B119	B120
B121	B122	B123	B124	B125	B126	B127	B128	B129	B130	B131	B132
B133	B134	B135	B136	B137	B138	B139	B140	B141	B142	B143	B144
B145	B146	B147	B148	B149	B150	B151	B152	B153	B154	B155	B156
B157	B158	B159	B160	B161	B162	B163	B164	B165	B166	B167	B168
B169	B170	B171	B172	B173	B174	B175	B176	B177	B178	B179	B180
B181	B182	B183	B184	B185	B186	B187	B188	B189	B190	B191	B192
B193	B194	B195	B196	B197	B198	B199	B200	B201	B202	B203	B204
B205	B206	B207	B208	B209	B210	B211	B212	B213	B214	B215	B216
B217	B218	B219	B220	B221	B222	B223	B224	B225	B226	B227	B228
B229	B230	B231	B232	B233	B234	B235	B236	B237	B238	B239	B240
B241	B242	B243	B244	B245	B246	B247	B248	B249	B250	B251	B252
B253	B254	B255	B256	B257	B258	B259	B260	B261	B262	B263	B264
B265	B266	B267	B268	B269	B270	B271	B272	B273	B274	B275	B276
B277	B278	B279	B280	B281	B282	B283	B284	B285	B286	B287	B288
B289	B290	B291	B292	B293	B294	B295	B296	B297	B298	B299	B300
B301	B302	B303	B304	B305	B306	B307	B308	B309	B310	B311	B312
B313	B314	B315	B316	B317	B318	B319	B320	B321	B322	B323	B324
B325	B326	B327	B328	B329	B330	B331	B332	B333	B334	B335	B336
B337	B338	B339	B340	B341	B342	B343	B344	B345	B346	B347	B348
B349	B350	B351	B352	B353	B354	B355	B356	B357	B358	B359	B360
B361	B362	B363	B364	B365	B366	B367	B368	B369	B370	B371	B372
B373	B374	B375	B376	B377	B378	B379	B380	B381	B382	B383	B384
B385	B386	B387	B388	B389	B390	B391	B392	B393	B394	B395	B396
B397	B398	B399	B400	B401	B402	B403	B404	B405	B406	B407	B408
B409	B410	B411	B412	B413	B414	B415	B416	B417	B418	B419	B420
B421	B422	B423	B424	B425	B426	B427	B428	B429	B430	B431	B432
B433	B434	B435	B436	B437	B438	B439	B440	B441	B442	B443	B444
B445	B446	B447	B448	B449	B450	B451	B452	B453	B454	B455	B456
B457	B458	B459	B460	B461	B462	B463	B464	B465	B466	B467	B468

$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	<u>Q</u> 1	\mathbf{Q}_1	$\underline{\mathbf{Q}}_1$	$\underline{\mathbf{Q}}_1$	<u>Q</u> 1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	<u>Q</u> 1
B469	B470	B471	B472	B473	B474	B475	B476	B477	B478	B479	B480
B481	B482	B483	B484	B485	B486	B487	B488	B489	B490	B491	B492
B493	B494	B495	B496	B497	B498	B499	B500	B501	B502	B503	B504
B505	B506	B507	B508	B509	B510	B511	B512	B513	B514	B515	B516
B517	B518	B519	B520	B521	B522	B523	B524	B525	B526	B527	B528
B529	B530	B531	B532	B533	B534	B535	B536	B537	B538	B539	B540
B541	B542	B543	B544	B545	B546	B547	B548	B549	B550	B551	B552
B553	B554	B555	B556	B557	B558	B559	B560	B561	B562	B563	B564
B565	B566	B567	B568	B569	B570	B571	B572	B573	B574	B575	B576
B577	B578	B579	B580	B581	B582	B583	B584	B585	B586	B587	B588
B589	B590	B591	B592	B593	B594	B595	B596	B597	B598	B599	B600
B601	B602	B603	B604	B605	B606	B607	B608	B609	B610	B611	B612
B613	B614	B615	B616	B617	B618	B619	B620	B621	B622	B623	B624
B625	B626	B627	B628	B629	B630	B631	B632	B633	B634	B 635	B636
B637	B638	B639	B640	B641	B642	B643	B644	B645	B646	B647	B648
B649	B650	B651	B652	B653	B654	B655	B656	B657	B658	B659	B660
B661	B662	B663	B664	B665	B666	B667	B668	B669	B670	B671	B672
B773	B774	B775	B776	B777	B778	B779	B780	B781	B782	B783	B784
B785	B786	B787	B788	B789	B790	B791	B792	B793	B794	B795	B796
B797	B798	B799	B800	B801	B802	B803	B804	B805	B806	B807	B808
B809	B810	B811	B812	B813	B814	B815	B816	B817	B818	B819	B820
B821	B822	B823	B824	B825	B826	B827	B828	B829	B830	B831	B832
B833	B834	B835	B836	B837	B838	B839	B840	B841	B842	B843	B844
B845	B846	B847	B848	B849	B850	B851	B852	B853	B854	B855	B856
B857	B858	B859	B860	B861	B862	B863	B864	B865	B866	B867	B868
B869	B870	B871	B872	B873	B874	B875	B876	B877	B878	B879	B880
B881	B882	B883	B884	B885	B886	B887	B888	B889	B890	B891	B892
B893	B894	B895	B896	B897	B898	B899	B900	B901	B902	B903	B904
B905	B906	B907	B908	B909	B910	B911	B912	B913	B914	B915	B916
B917	B918	B919	B920	B921	B922	B923	B924	B925	B926	B927	B928
B929	B930	B931	B932	B933	B934	B935	B936	B937	B938	B939	B940
B941	B942	B943	B944	B945	B946	B947	B948	B949	B950	B951	B952
B953	B954	B955	B956	B957	B958	B959	B960	B961	B962	B963	B964

 Q_1 Q_1 Q_1 Q_1 Q_1 Q_1 Q_1 $\mathbf{Q_1}$ Q_1 \mathbf{Q}_1 $\mathbf{Q_1}$ Q_1 B965 B966 B967 B968 B969 B970 B971 B972 B973 B974 B975 B976 B977 B978 B979 B980 B981 B982 B983 B984 B985 B986 B987 B988 B989 B990 B991 B992 B993 B994 B995 B996 B997 B998 B999 B1000 B1001 B1002 B1003 B1004 B1005 B1006 B1007 B1008 B1009 B1010 B1011 B1012 B1013 B1014 B1015 B1016 B1017 B1018 B1019 B1020 B1021 B1022 B1023 B1024 B1025 B1026 B1027 B1028 B1029 B1030 B1031 B1032 B1033 B1034 B1035 B1036 B1037 B1038 B1039 B1040 B1041 B1042 B1043 B1044 B1045 B1046 B1047 B1048 B1049 B1050 B1051 B1052 B1053 B1054 B1055 B1056 B1057 B1058 B1059 B1060 B1061 B1062 B1063 B1064 B1065 B1066 B1067 B1068 B1069 B1070 B1071 B1072 B1073 B1074 B1075 B1076 B1077 B1078 B1079 B1080 B1081 B1082 B1083 B1084 B1085 B1086 B1087 B1088 B1089 B1090 B1091 B1092 B1093 B1094 B1095 B1096 B1097 B1098 B1099 B1100 B1101 B1102 B1103 B1104 B1105 B1106 B1107 B1108 B1109 B1110 B1111 B1112 B1113 B1114 B1115 B1116 B1117 B1118 B1119 B1120 B1121 B1122 B1123 B1124 B1125 B1126 B1127 B1128 B1129 B1130 B1131 B1132 B1133 B1134 B1135 B1136 B1137 B1138 B1139 B1140 B1141 B1142 B1143 B1144 B1145 B1146 B1147 B1148 B1149 B1150 B1151 B1152 B1153 B1154 B1155 B1156 B1157 B1158 B1159 B1160 B1161 B1162 B1163 B1164 B1165 B1166 B1167 B1168 B1169 B1170 B1171 B1172 B1173 B1174 B1175 B1176 B1177 B1178 B1179 B1180 B1181 B1182 B1183 B1184 B1185 B1186 B1187 B1188 B1189 B1190 B1191 B1192 B1193 B1194 B1195 B1196 B1197 B1198 B1199 B1200 B1201 B1202 B1203 B1204 B1205 B1206 B1207 B1208 B1209 B1210 B1211 B1212 B1213 B1214 B1215 B1216 B1217

Table 14: Compounds of the formula Ih (p is 0 or 1):

$$CF_3CF_2CF_2$$
 N
 CH_3
 CH_3
 (Ih)

 Q_1 \mathbf{Q}_1 Q_1 <u>Q</u>1 <u>Q</u>₁ Q_1 Q_1 Q_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 B1 B2 **B3** B4 B5 B6 **B7 B8** В9 B10 B11 **B12 B13 B14 B**15 **B16 B17 B18 B19** B20 B21 B22 **B23**

<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	\underline{Q}_1	<u>Q</u> 1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1
B25	B26	B27	B28	B29	B30	B31	B32	B33	B34	B 35	B36
B37	B38	B39	B40	B41	B42	B43	B44	B45	B46	B47	B48
B49	B50	B51	B52	B53	B54	B55	B56	B57	B58	B59	B60
B61	B62	B63	B64	B65	B66	B67	B68	B69	B70	B71	B72
B73	B74	B75	B76	B77	B78	B79	B80	B81	B82	B83	B84
B85	B86	B87	B88	B89	B90	B91	B92	B93	B94	B 95	B96
B97	B98	B99	B100	B101	B102	B103	B104	B105	B106	B107	B108
B109	B110	B111	B112	B113	B114	B115	B116	B117	B118	B119	B120
B121	B122	B123	B124	B125	B126	B127	B128	B129	B130	B131	B132
B133	B134	B135	B136	B137	B138	B139	B140	B141	B142	B143	B144
B145	B146	B147	B148	B149	B150	B151	B152	B153	B154	B1 55	B156
B157	B158	B159	B160	B161	B162	B163	B164	B165	B166	B167	B168
B169	B170	B171	B172	B173	B174	B175	B176	B177	B178	B179	B180
B181	B182	B183	B184	B185	B186	B187	B188	B189	B190	B191	B192
B193	B194	B 195	B196	B197	B198	B 199	B200	B201	B202	B203	B204
B2 05	B206	B207	B208	B209	B210	B211	B212	B213	B214	B215	B216
B217	B218	B219	B220	B221	B222	B223	B224	B225	B226	B227	B228
B229	B230	B231	B232	B233	B234	B235	B236	B237	B238	B239	B240
B241	B242	B243	B244	B245	B246	B247	B248	B249	B250	B251	B252
B253	B254	B255	B256	B257	B258	B259	B260	B261	B262	B263	B264
B265	B266	B267	B268	B269	B270	B271	B272	B273	B274	B275	B276
B277	B278	B279	B280	B281	B282	B283	B284	B285	B286	B287	B288
B289	B290	B291	B292	B293	B294	B295	B296	B297	B298	B299	B300
B301	B302	B303	B304	B305	B306	B307	B308	B309	B310	B311	B312
B313	B314	B315	B316	B317	B318	B 319	B320	B321	B322	B323	B324
B325	B326	B327	B328	B329	B330	B331	B332	B333	B334	B335	B336
B337	B338	B339	B340	B341	B342	B343	B344	B345	B346	B347	B348
B349	B350	B351	B352	B353	B354	B 355	B356	B357	B358	B359	B360
B361	B362	B363	B364	B365	B366	B367	B368	B369	B370	B371	B372
B373	B374	B375	B376	B377	B378	B379	B380	B381	B382	B383	B384
B 385	B386	B387	B388	B389	B390	B391	B392	B393	B394	B 395	B396
B397	B398	B399	B400	B401	B402	B403	B404	B405	B406	B407	B408
B409	B410	B411	B412	B413	B414	B415	B416	B417	B418	B419	B420

<u>Q</u> 1	\underline{Q}_1	<u>Q</u> 1	\underline{Q}_1	<u>Q</u> 1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1	\underline{Q}_1
B421	B422	B423	B424	B425	B426	B427	B428	B429	B430	B431	B432
B433	B434	B435	B436	B437	B438	B439	B440	B441	B442	B443	B444
B445	B446	B447	B448	B449	B450	B451	B452	B453	B454	B455	B456
B457	B458	B459	B460	B461	B462	B463	B464	B465	B466	B467	B468
B469	B470	B471	B472	B473	B474	B475	B476	B477	B478	B479	B480
B481	B482	B483	B484	B485	B486	B487	B488	B489	B490	B491	B492
B493	B494	B495	B496	B497	B498	B499	B500	B501	B502	B503	B504
B505	B506	B507	B508	B509	B510	B511	B512	B513	B514	B515	B516
B517	B518	B519	B520	B521	B522	B523	B524	B525	B526	B527	B528
B529	B530	B531	B532	B533	B534	B535	B536	B537	B538	B539	B540
B541	B542	B543	B544	B545	B546	B547	B548	B549	B550	B551	B552
B553	B554	B555	B556	B557	B558	B559	B560	B561	B562	B563	B564
B565	B566	B567	B568	B569	B570	B571	B572	B573	B574	B575	B576
B577	B578	B579	B580	B581	B582	B583	B584	B585	B586	B587	B588
B589	B590	B591	B592	B593	B594	B595	B596	B597	B598	B599	B600
B601	B602	B603	B604	B605	B606	B607	B608	B609	B610	B611	B612
B613	B614	B615	B616	B617	B618	B619	B620	B621	B622	B623	B624
B625	B626	B627	B628	B629	B630	B631	B632	B633	B634	B635	B636
B637	B638	B639	B640	B641	B642	B643	B644	B645	B646	B647	B648
B649	B650	B651	B652	B653	B654	B655	B656	B657	B658	B659	B660
B661	B662	B663	B664	B665	B666	B667	B668	B669	B670	B671	B672
B773	B774	B775	B776	B777	B778	B779	B780	B781	B782	B783	B784
B785	B786	B787	B788	B789	B790	B791	B792	B793	B794	B795	B796
B 7 97	B798	B799	B800	B801	B802	B803	B804	B805	B806	B807	B808
B809	B810	B811	B812	B813	B814	B815	B816	B817	B818	B819	B820
B821	B822	B823	B824	B825	B826	B827	B828	B829	B830	B831	B832
B833	B834	B835	B836	B837	B838	B839	B840	B841	B842	B843	B844
B845	B846	B847	B848	B849	B850	B851	B852	B853	B854	B855	B856
B857	B858	B859	B860	B861	B862	B863	B864	B865	B866	B867	B868
B869	B870	B871	B872	B873	B874	B875	B876	B877	B878	B879	B880
B881	B882	B883	B884	B885	B886	B887	B888	B889	B890	B891	B892
B893	B894	B895	B896	B897	B898	B899	B900	B901	B902	B903	B904
B905	B906	B907	B908	B909	B910	B911	B912	B913	B914	B915	B916

<u>Q</u>₁ Q_1 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 Q_1 Q_1 Q_1 B917 B918 B919 B920 B921 B922 B923 B924 B925 B926 B927 B928 B929 B930 B934 B931 B932 B933 B935 B936 B937 B938 B939 B940 B941 B942 B943 B944 B945 B946 B947 B948 B949 B950 B951 B952 B953 B954 B955 B956 B957 B958 B959 B960 B961 B962 B963 B964 B965 B966 B967 B968 B969 B970 B971 B972 B973 B974 B975 B976 B977 B978 B979 B980 B981 B982 B983 B984 B985 B986 B987 B988 B989 B990 B991 B992 B993 B994 B995 B996 B997 B998 B999 B1000 B1001 B1002 B1003 B1004 B1005 B1006 B1007 B1008 B1009 B1010 B1011 B1012 B1013 B1014 B1015 B1016 B1017 B1018 B1019 B1020 B1021 B1022 B1023 B1024 B1025 B1026 B1027 B1028 B1029 B1030 B1031 B1032 B1033 B1034 B1035 B1036 B1037 B1038 B1039 B1040 B1041 B1042 B1043 B1044 B1045 B1046 B1047 B1048 B1049 B1050 B1051 B1052 B1053 B1054 B1055 B1056 B1057 B1058 B1059 B1060 B1061 B1062 B1063 B1064 B1065 B1066 B1067 B1068 B1069 B1070 B1071 B1072 B1073 B1074 B1075 B1076 B1077 B1078 B1079 B1080 B1081 B1082 B1083 B1084 B1085 B1086 B1087 B1088 B1089 B1090 B1091 B1092 B1093 B1094 B1095 B1096 B1097 B1098 B1099 B1100 B1101 B1102 B1103 B1104 B1105 B1106 B1107 B1108 B1109 B1110 B1111 B1112 B1113 B1114 B1115 B1116 B1117 B1118 B1119 B1120 B1121 B1122 B1123 B1124 B1125 B1126 B1127 B1128 B1129 B1130 B1131 B1132 B1133 B1134 B1135 B1136 B1137 B1138 B1139 B1140 B1141 B1142 B1143 B1144 B1145 B1146 B1147 B1148 B1149 B1150 B1151 B1152 B1153 B1154 B1155 B1156 B1157 B1158 B1159 B1160 B1161 B1162 B1163 B1164 B1165 B1166 B1167 B1168 B1169 B1170 B1171 B1172 B1173 B1174 B1175 B1176 B1177 B1178 B1179 B1180 B1181 B1182 B1183 B1184 B1185 B1186 B1187 B1188 B1189 B1190 B1191 B1192 B1193 B1194 B1195 B1196 B1197 B1198 B1199 B1200 B1201 B1202 B1203 B1204 B1205 B1206 B1207 B1208 B1209 B1210 B1211 B1212 B1213 B1214 B1215 B1216 B1217

Table 15: Compounds of the formula lk (p is 0 or 1):

$$CF_3$$
 N
 $(O)p$
 (Ik)

<u>Q</u> 1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	\mathbf{Q}_1	$\underline{\mathbf{Q}}_1$	\underline{Q}_1	\mathbf{Q}_1	\underline{Q}_1	$\underline{\mathbf{Q}_1}$	\underline{Q}_1	$\underline{\mathbf{Q}}_{1}$	\mathbf{Q}_1
B1	B2	В3	B4	B5	B6	B 7	B8	B 9	B10	B11	B12
B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23	-
B25	B26	B27	B28	B29	B30	B31	B32	B33	B34	B35	B36
B37	B38	B39	B40	B41	B42	B43	B44	B45	B46	B47	B48
B49	B50	B51	B52	B53	B54	B55	B56	B57	B58	B59	B60
B61	B62	B63	B64	B65	B66	B67	B68	B69	B70	B71	B72
B73	B74	B75	B76	B77	B78	B 79	B80	B81	B82	B83	B84
B85	B86	B87	B88	B89	B90	B91	B92	B93	B94	B95	B96
B97	B98	B99	B100	B101	B102	B103	B104	B105	B106	B107	B108
B109	B110	B111	B112	B113	B114	B115	B116	B117	B118	B119	B120
B121	B122	B123	B124	B125	B126	B127	B128	B129	B130	B131	B132
B133	B134	B135	B136	B137	B138	B139	B140	B141	B142	B143	B144
B145	B146	B147	B148	B149	B150	B151	B152	B153	B154	B155	B156
B157	B158	B159	B160	B161	B162	B163	B164	B165	B166	B167	B168
B169	B170	B171	B172	B173	B174	B 175	B176	B177	B178	B179	B180
B181	B182	B183	B184	B185	B186	B187	B188	B189	B190	B191	B192
B193	B194	B195	B196	B197	B198	B199	B200	B201	B202	B203	B204
B205	B206	B207	B208	B209	B210	B211	B212	B213	B214	B215	B216
B217	B218	B219	B220	B221	B222	B223	B224	B225	B226	B227	B228
B229	B230	B231	B232	B233	B234	B235	B236	B237	B238	B239	B240
B241	B242	B243	B244	B245	B246	B247	B248	B249	B250	B251	B252
B253	B254	B255	B256	B257	B258	B259	B260	B261	B262	B263	B264
B265	B266	B267	B268	B269	B270	B271	B272	B273	B274	B275	B276
B277	B278	B279	B280	B281	B282	B283	B284	B285	B286	B287	B288
B289	B290	B291	B292	B293	B294	B295	B296	B297	B298	B299	B300
B301	B302	B303	B304	B305	B306	B307	B308	B309	B310	B311	B312
B313	B314	B315	B316	B317	B318	B319	B320	B321	B322	B323	B324
B325	B326	B327	B328	B329	B330	B331	B332	B333	B334	B335	B336
B337	B338	B339	B340	B341	B342	B343	B344	B345	B346	B347	B348
B349	B350	B351	B352	B353	B354	B3 55	B356	B357	B358	B359	B360
B361	B362	B363	B364	B365	B366	B367	B368	B369	B370	B371	B372
B373	B374	B375	B376	B377	B378	B379	B380	B381	B382	B383	B384
B385	B386	B387	B388	B389	B390	B391	B392	B393	B394	B395	B396

$\underline{\mathbf{Q}}_1$	<u>Q</u> 1	<u>Q</u> 1	\mathbf{Q}_1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	$\underline{\mathbf{Q}}_1$				
B397	B398	B399	B400	B401	B402	B403	B404	B405	B406	B407	B408
B409	B410	B411	B412	B413	B414	B415	B416	B417	B418	B419	B420
B421	B422	B423	B424	B425	B426	B427	B428	B429	B430	B431	B432
B433	B434	B435	B436	B437	B438	B439	B440	B441	B442	B443	B444
B445	B446	B447	B448	B449	B450	B451	B452	B453	B454	B455	B456
B457	B458	B459	B460	B461	B462	B463	B464	B465	B466	B467	B468
B469	B470	B471	B472	B473	B474	B475	B476	B477	B478	B479	B480
B481	B482	B483	B484	B485	B486	B487	B488	B489	B490	B491	B492
B493	B494	B495	B496	B497	B498	B499	B500	B501	B502	B503	B504
B505	B506	B507	B508	B509	B510	B511	B512	B513	B514	B515	B516
B517	B518	B519	B520	B521	B522	B523	B524	B525	B526	B527	B528
B529	B530	B531	B532	B533	B534	B535	B536	B537	B538	B539	B540
B541	B542	B543	B544	B545	B546	B547	B548	B549	B550	B551	B552
B553	B554	B555	B556	B557	B558	B559	B560	B561	B562	B563	B564
B565	B566	B567	B568	B569	B570	B571	B572	B573	B574	B575	B576
B577	B578	B579	B580	B581	B582	B583	B584	B585	B586	B587	B588
B589	B590	B591	B592	B593	B594	B595	B596	B597	B598	B599	B600
B601	B602	B603	B604	B605	B606	B607	B608	B60 9	B610	B611	B612
B613	B614	B615	B616	B617	B618	B619	B620	B621	B622	B623	B624
B625	B626	B627	B628	B629	B630	B631	B632	B633	B634	B635	B636
B637	B638	B639	B640	B641	B642	B643	B644	B64 5	B646	B647	B648
B649	B650	B651	B652	B653	B654	B655	B656	B657	B658	B659	B660
B661	B662	B663	B664	B665	B666	B667	B668	B669	B670	B671	B672
B773	B774	B775	B776	B777	B778	B779	B780	B781	B782	B783	B784
B785	B786	B787	B788	B789	B790	B791	B792	B793	B794	B795	B796
B797	B798	B799	B800	B801	B802	B803	B804	B805	B806	B807	B808
B809	B810	B811	B812	B813	B814	B815	B816	B817	B818	B819	B820
B821	B822	B823	B824	B825	B826	B827	B828	B829	B830	B831	B832
B833	B834	B835	B836	B837	B838	B839	B840	B841	B842	B843	B844
B845	B846	B847	B848	B849	B850	B851	B852	B853	B854	B855	B856
B857	B858	B859	B860	B861	B862	B863	B864	B865	B866	B867	B868
B869	B870	B871	B872	B873	B874	B875	B876	B877	B878	B879	B880
B881	B882	B883	B884	B885	B886	B887	B888	B889	B890	B891	B892

 \mathbf{Q}_1 Q_1 \mathbf{Q}_1 Q_1 \mathbf{Q}_1 \mathbf{Q}_1 Q_1 $\mathbf{Q_1}$ \mathbf{Q}_1 \mathbf{Q}_1 Q_1 Q_1 B893 B894 B895 B896 B897 B898 B899 B900 B901 B902 B903 B904 B905 B906 B907 B908 B909 B910 B911 B912 B913 B914 B915 B916 B917 B918 B919 B920 B921 B922 B923 B924 B925 B926 B927 B928 B929 B930 B931 B932 B933 B934 B935 B936 B937 B938 B939 B940 B941 B942 B943 B944 B945 B946 B947 B948 B949 B950 B951 B952 B953 B954 B955 B956 B957 B958 B959 B960 B961 B962 B963 B964 B965 B967 B966 B968 B969 B970 B971 B972 B973 B974 B975 B976 B977 B978 B979 B980 B981 B982 B983 B984 B985 B986 B987 B988 B989 B990 B991 B992 B993 B994 B995 B996 B997 B998 B999 B1000 B1001 B1002 B1003 B1004 B1005 B1006 B1007 B1008 B1009 B1010 B1011 B1012 B1013 B1014 B1015 B1016 B1017 B1018 B1019 B1020 B1021 B1022 B1023 B1024 B1025 B1026 B1027 B1028 B1029 B1030 B1031 B1032 B1033 B1034 B1035 B1036 B1037 B1038 B1039 B1040 B1041 B1042 B1043 B1044 B1045 B1046 B1047 B1048 B1049 B1050 B1051 B1052 B1053 B1054 B1055 B1056 B1057 B1058 B1059 B1060 B1061 B1062 B1063 B1064 B1065 B1066 B1067 B1068 B1069 B1070 B1071 B1072 B1073 B1074 B1075 B1076 B1077 B1078 B1079 B1080 B1081 B1082 B1083 B1084 B1085 B1086 B1087 B1088 B1089 B1090 B1091 B1092 B1093 B1094 B1095 B1096 B1097 B1098 B1099 B1100 B1101 B1102 B1103 B1104 B1105 B1106 B1107 B1108 B1109 B1110 B1111 B1112 B1113 B1114 B1115 B1116 B1117 B1118 B1119 B1120 B1121 B1122 B1123 B1124 B1125 B1126 B1127 B1128 B1129 B1130 B1131 B1132 B1133 B1134 B1135 B1136 B1137 B1138 B1139 B1140 B1141 B1142 B1143 B1144 B1145 B1146 B1147 B1148 B1149 B1150 B1151 B1152 B1153 B1154 B1155 B1156 B1157 B1158 B1159 B1160 B1161 B1162 B1163 B1164 B1165 B1166 B1167 B1168 B1169 B1170 B1171 B1172 B1173 B1174 B1175 B1176 B1177 B1178 B1179 B1180 B1181 B1182 B1183 B1184 B1185 B1186 B1187 B1188 B1189 B1190 B1191 B1192 B1193 B1194 B1195 B1196 B1197 B1198 B1199 B1200 B1201 B1202 B1203 B1204 B1205 B1206 B1207 B1208 B1209 B1210 B1211 B1212 B1213 B1214 B1215 B1216 B1217

Table 16: Compounds of the formula Im (p is 0 or 1):

$$CF_3$$
 N
 CH_2OCH_3 (Im)

 Q_1 $\mathbf{Q}_{\mathbf{1}}$ $\mathbf{Q_1}$ \mathbf{Q}_1 $\mathbf{Q_1}$ $\mathbf{Q_1}$ \mathbf{Q}_1 \mathbf{Q}_{1} $\mathbf{Q}_{\mathbf{1}}$ \mathbf{Q}_1 \underline{Q}_1 \mathbf{Q}_1 B1 B2 **B**3 B4 **B**5 **B6 B**7 **B8** B9 **B10** B11 **B12 B13 B14** B15 **B16 B17 B18 B19 B20 B21 B22 B23** -**B25 B26 B27 B28 B29 B30 B31 B32 B33 B34 B35 B36 B37 B38 B**39 **B40** B41 B42 **B43 B44 B**45 **B46 B47 B48 B49 B50 B51 B52 B53 B54 B**55 **B**56 **B57 B58 B**59 **B60 B61 B62** B63 **B64 B65 B66 B67 B68 B69 B70** B71 **B72 B73 B74 B75 B76 B77 B78 B79 B80** B81 **B82 B83 B84 B85 B87 B86 B88 B89 B90 B91** B92 **B93 B94 B95 B96 B97 B98 B99** B100 B101 B102 B103 B104 B105 B106 B107 B108 B109 B110 B111 B112 B113 B114 B115 B116 B117 B118 B119 B120 B121 B122 B123 B124 B125 B126 B127 B128 B129 B130 B132 B131 B133 B134 B135 B136 B137 B138 B139 B140 B141 B142 B143 B144 B145 B146 B147 B148 B150 B149 B151 B152 B153 B154 B155 B156 B157 B158 B159 B160 B161 B162 B163 B164 B165 B166 B167 **B168** B169 B170 B171 B172 B173 B174 B175 B176 B177 B178 B179 B180 B181 B182 B183 B184 B185 B186 B187 B188 B189 B190 B191 B192 B193 B194 B195 B196 B197 B198 B199 B200 B201 B202 B203 B204 B205 B206 B207 B208 B209 B210 B211 B214 B212 B213 B215 B216 B217 B218 B219 B220 B221 B222 B223 B224 B225 B226 B227 B228 B229 B230 B231 B232 B233 B234 B235 B237 B236 B238 B239 B240 B241 B242 B243 B244 B245 B246 B247 B248 B249 B250 B251 B252 B253 B254 B255 B256 B257 B258 B259 **B260** B261 B262 B263 B264 B265 B266 B267 B268 B269 B270 B271 B272 B273 B274 B275 B276 B277 B278 B279 B284 B280 B281 B282 B283 B285 B286 B287 B288 B289 B290 B291 B292 B293 B294 B295 B296 B297 B298 B299 B300 B301 B302 B303 B304 B305 B306 B307 **B308** B309 B310 B311 B312 B313 B314 B315 B316 B317 B318 B319 B320 B321 B322 B323 B324

$\underline{\mathbf{Q}_1}$	<u>Q</u> 1	$\underline{\mathbf{Q}}_1$	<u>Q</u> 1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$
B325	B326	B327	B328	B329	B330	B331	B332	B333	B334	B335	B336
B337	B338	B339	B340	B341	B342	B343	B344	B345	B346	B347	B348
B349	B350	B351	B352	B353	B354	B355	B356	B357	B358	B359	B360
B361	B362	B363	B364	B365	B366	B367	B368	B369	B370	B371	B372
B373	B374	B375	B376	B377	B378	B 379	B380	B381	B382	B383	B384
B385	B386	B387	B388	B389	B390	B391	B392	B393	B394	B395	B396
B397	B398	B399	B400	B401	B402	B403	B404	B405	B406	B407	B408
B409	B410	B411	B412	B413	B414	B415	B416	B417	B418	B419	B420
B421	B422	B423	B424	B425	B426	B427	B428	B429	B430	B431	B432
B433	B434	B435	B436	B437	B438	B439	B440	B441	B442	B443	B444
B445	B446	B447	B448	B449	B450	B451	B452	B453	B454	B455	B456
B457	B458	B459	B460	B461	B462	B463	B464	B465	B466	B467	B468
B469	B470	B471	B472	B473	B474	B475	B476	B477	B478	B479	B480
B481	B482	B483	B484	B485	B486	B487	B488	B489	B490	B491	B492
B493	B494	B495	B496	B497	B498	B499	B500	B501	B502	B503	B504
B505	B506	B507	B508	B509	B510	B511	B512	B513	B514	B515	B516
B517	B518	B519	B520	B521	B522	B523	B524	B525	B526	B527	B528
B529	B530	B531	B532	B533	B534	B535	B536	B537	B538	B539	B540
B541	B542	B543	B544	B545	B546	B547	B548	B549	B550	B551	B552
B553	B554	B555	B556	B557	B558	B559	B560	B561	B562	B563	B564
B565	B566	B567	B568	B569	B570	B571	B572	B573	B574	B575	B576
B577	B578	B579	B580	B581	B582	B583	B584	B585	B586	B587	B588
B589	B590	B591	B592	B593	B594	B595	B596	B597	B598	B599	B600
B601	B602	B603	B604	B605	B606	B607	B608	B609	B610	B611	B612
B613	B614	B615	B616	B617	B618	B619	B620	B621	B622	B623	B624
B625	B626	B627	B628	B629	B630	B631	B632	B633	B634	B635	B636
B637	B638	B639	B640	B641	B642	B643	B644	B645	B646	B647	B648
B649	B650	B651	B652	B653	B654	B655	B656	B657	B658	B659	B660
B661	B662	B663	B664	B665	B666	B667	B668	B669	B670	B671	B672
B773	B774	B775	B776	B777	B778	B779	B780	B781	B782	B783	B784
B785	B786	B787	B788	B789	B790	B791	B792	B793	B794	B795	B796
B797	B798	B799	B800	B801	B802	B803	B804	B805	B806	B807	B808
B809	B810	B811	B812	B813	B814	B815	B816	B817	B818	B819	B820

 Q_1 Q_1 \mathbf{Q}_1 $\mathbf{Q_1}$ \mathbf{Q}_1 Q_1 $\mathbf{Q}_{\mathbf{1}}$ Q_1 Q_1 Q_1 Q_1 Q_1 B821 B822 B823 B824 B825 B828 B826 B827 B829 B830 B831 B832 B833 B834 B835 B836 B837 B838 B839 B840 B841 B842 B843 B844 B845 B846 B847 B848 B849 B850 B851 B852 B853 B854 B855 B856 B857 B858 B859 B860 B861 B862 B863 B864 B865 **B866** B867 B868 B869 B870 B871 B872 B873 B874 B875 B876 B877 B878 B879 B880 B881 B882 B883 B884 B885 B886 B887 B889 B888 B890 B891 B892 B893 B895 B894 B896 B897 B898 B899 B901 B900 B902 B903 B904 B905 B906 B907 B908 B909 B910 B911 B912 B913 B914 B915 B916 B919 B917 B918 B920 B921 B922 B923 B924 B925 B926 B927 B928 B929 B930 B931 B932 B933 B934 B935 B936 B937 B938 B939 B940 B941 B942 B943 B944 B945 B946 B947 B948 B949 B950 B951 B952 B953 B954 B955 B956 B957 B958 B959 B960 B961 B962 B963 B964 B965 B966 B967 B968 B969 B970 B973 B971 B972 B974 B975 B976 B977 B978 B979 B980 B982 B981 B983 B984 B985 B986 B987 B988 B989 B990 B991 B992 B993 B994 B995 B996 B997 B998 B999 B1000 B1001 B1002 B1003 B1004 B1005 B1006 B1007 B1008 B1009 B1010 B1011 B1012 B1013 B1014 B1015 B1016 B1017 B1018 B1019 B1020 B1021 B1022 B1023 B1024 B1025 B1026 B1027 B1028 B1029 B1030 B1031 B1032 B1033 B1034 B1035 B1036 B1037 B1038 B1039 B1040 B1041 B1042 B1043 B1044 B1045 B1046 B1047 B1048 B1049 B1050 B1051 B1052 B1053 B1054 B1055 B1056 B1057 B1058 B1059 B1060 B1061 B1062 B1063 B1064 B1065 B1066 B1067 B1068 B1069 B1070 B1071 B1072 B1073 B1074 B1075 B1076 B1077 B1078 B1079 B1080 B1081 B1082 B1083 B1084 B1085 B1086 B1087 B1088 B1089 B1090 B1091 B1092 B1093 B1094 B1095 B1096 B1097 B1098 B1099 B1100 B1101 B1102 B1103 B1104 B1105 B1106 B1107 B1108 B1109 B1110 B1111 B1112 B1113 B1114 B1115 B1116 B1117 B1118 B1119 B1120 B1121 B1122 B1123 B1124 B1125 B1126 B1127 B1128 B1129 B1130 B1131 B1132 B1133 B1134 B1135 B1136 B1137 B1138 B1139 B1140 B1141 B1142 B1143 B1144 B1145 B1146 B1147 B1148 B1149 B1150 B1151 B1152 B1153 B1154 B1155 B1156 B1157 B1158 B1159 B1160 B1161 B1162 B1163 B1164 B1165 B1166 B1167 B1168 B1169 B1170 B1171 B1172 B1173 B1174 B1175 B1176 B1177 B1178 B1179 B1180 B1181 B1182 B1183 B1184 B1185 B1186 B1187 B1188 B1189 B1190 B1191 B1192 B1193 B1194 B1195 B1196 B1197 B1198 B1199 B1200 B1201 B1202 B1203 B1204 B1205 B1206 B1207 B1208 B1209 B1210 B1211 B1212 B1213 B1214 B1215 B1216

Table 17: Compounds of the formula In (p is 0 or 1):

$$CHF_{2} \xrightarrow{N} CH_{3} CH_{3} (In)$$

$\underline{\mathbf{Q}}_{1}$	\underline{Q}_1	\mathbf{Q}_1	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	<u>Q</u> 1	\underline{Q}_1	$\underline{\mathbf{Q}_1}$	$\underline{\mathbf{Q}_1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}_1}$
B1	B2	B3	B4	B 5	B6	B7	B8	B9	B10	B11	B12
B13	B14	B1 5	B16	B17	B18	B19	B20	B21	B22	B23	-
B25	B26	B27	B28	B29	B30	B31	B32	B33	B34	B35	B36
B37	B38	B39	B40	B41	B42	B43	B44	B45	B46	B47	B48
B49	B50	B51	B52	B53	B54	B55	B56	B57	B58	B59	B60
B61	B62	B63	B64	B65	B66	B67	B68	B69	B70	B71	B72
B7 3	B74	B 75	B76	B77	B78	B79	B80	B81	B82	B83	B84
B85	B86	B87	B88	B89	B90	B91	B92	B 93	B94	B9 5	B96
B97	B98	B99	B100	B101	B102	B103	B104	B105	B106	B107	B108
B109	B110	B111	B112	B113	B114	B115	B116	B117	B118	B 119	B120
B121	B122	B123	B124	B125	B126	B127	B128	B129	B130	B131	B132
B133	B134	B135	B136	B137	B138	B139	B140	B141	B142	B143	B144
B145	B146	B147	B148	B149	B150	B151	B152	B153	B154	B155	B156
B157	B158	B159	B160	B161	B162	B163	B164	B165	B166	B167	B168
B169	B170	B171	B172	B173	B174	B175	B176	B177	B178	B179	B180
B181	B182	B183	B184	B185	B186	B187	B188	B189	B190	B191	B192
B193	B194	B195	B196	B197	B198	B199	B200	B201	B202	B203	B204
B205	B206	B207	B208	B209	B210	B211	B212	B213	B214	B215	B216
B217	B218	B219	B220	B221	B222	B223	B224	B225	B226	B227	B228
B229	B230	B231	B232	B233	B234	B235	B236	B237	B238	B239	B240
B241	B242	B243	B244	B245	B246	B247	B248	B249	B250	B251	B252
B253	B254	B255	B256	B257	B258	B259	B260	B261	B262	B263	B264

<u>Q</u> 1	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	$\underline{\mathbf{Q}}_{1}$	\underline{Q}_1	\underline{Q}_1	$\underline{\mathbf{Q}}_1$	\underline{Q}_1	\underline{Q}_1	<u>Q</u> 1	<u>Q</u> 1	<u>Q</u> 1
B265	B266	B267	B268	B269	B270	B271	B272	B273	B274	B275	B276
B277	B278	B279	B280	B281	B282	B283	B284	B285	B286	B287	B288
B289	B290	B291	B292	B293	B294	B295	B296	B297	B298	B299	B300
B301	B302	B303	B304	B305	B306	B307	B308	B309	B310	B311	B312
B313	B314	B315	B316	B317	B318	B319	B320	B321	B322	B323	B324
B325	B326	B327	B328	B329	B330	B331	B332	B333	B334	B335	B336
B337	B338	B339	B340	B341	B342	B343	B344	B345	B346	B347	B348
B349	B350	B351	B352	B353	B354	B355	B356	B357	B358	B359	B360
B361	B362	B363	B364	B365	B366	B367	B368	B369	B370	B371	B372
B373	B374	B375	B376	B377	B378	B379	B380	B381	B382	B383	B384
B385	B386	B387	B388	B389	B390	B391	B392	B393	B394	B395	B396
B397	B398	B399	B400	B401	B402	B403	B404	B405	B406	B407	B408
B409	B410	B411	B412	B413	B414	B415	B416	B417	B418	B419	B420
B421	B422	B423	B424	B425	B426	B427	B428	B429	B430	B431	B432
B433	B434	B435	B436	B437	B438	B439	B440	B441	B442	B443	B444
B445	B446	B447	B448	B449	B450	B451	B452	B453	B454	B455	B456
B457	B458	B459	B460	B461	B462	B463	B464	B465	B466	B467	B468
B469	B470	B471	B472	B473	B474	B475	B476	B477	B478	B479	B480
B481	B482	B483	B484	B485	B486	B487	B488	B489	B490	B491	B492
B493	B494	B495	B496	B497	B498	B499	B500	B501	B502	B503	B504
B505	B506	B507	B508	B509	B510	B511	B512	B513	B514	B515	B516
B517	B518	B519	B520	B521	B522	B523	B524	B525	B526	B527	B528
B529	B530	B531	B532	B533	B534	B535	B536	B537	B538	B539	B540
B541	B542	B543	B544	B545	B546	B547	B548	B549	B550	B551	B552
B553	B554	B555	B556	B557	B558	B559	B560	B561	B562	B563	B564
B565	B566	B567	B568	B569	B570	B571	B572	B573	B574	B575	B576
B577	B578	B579	B580	B581	B582	B583	B584	B585	B586	B587	B588
B589	B590	B591	B592	B593	B594	B595	B596	B597	B598	B599	B600
B601	B602	B603	B604	B605	B606	B607	B608	B609	B610	B611	B612
B613	B614	B615	B616	B617	B618	B619	B620	B621	B622	B623	B624
B625	B626	B627	B628	B629	B630	B631	B632	B633	B634	B635	B636
B637	B638	B639	B640	B641	B642	B643	B644	B645	B646	B647	B648
B649	B650	B651	B652	B653	B654	B655	B656	B657	B658	B659	B660

 \mathbf{Q}_1 <u>Q</u>1 Q_1 Q_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 Q_1 \mathbf{Q}_1 Q_1 \mathbf{Q}_1 B661 B662 B663 B664 B665 B666 B667 B668 B669 B670 B671 B672 B773 B774 B775 B776 B777 B778 B779 B780 B781 B782 B783 B784 B785 B786 B787 B788 B789 B790 B791 B792 B793 B794 B795 B796 B797 B798 B799 B800 B801 B802 B803 B804 B805 B806 B807 B808 B809 B810 B811 B812 B813 B814 B815 B816 B817 B818 B819 B820 B821 B822 B823 B824 B825 B826 B827 B828 B829 B830 B831 B832 B833 B834 B835 B836 B837 B838 B839 B840 B841 B842 B843 B844 B845 B846 B847 B848 B849 B850 B851 B852 B853 B854 B855 B856 B857 B858 B859 B860 B862 B863 B861 B864 B865 B866 B867 B868 B869 B870 B871 B872 B873 B874 B875 B877 B876 B878 B879 B880 B881 B882 B883 B884 B885 B886 B887 B888 B889 B890 B891 B892 B893 B894 B895 B896 B897 B898 B899 B900 B901 B902 B903 B904 **B905** B906 B907 B908 B909 B910 B911 B912 B913 B914 B915 B916 B917 B918 B919 B920 B921 B922 B923 B924 B925 B926 B927 B928 B929 B930 B931 B932 B933 B934 B937 B935 B936 B938 B939 B940 B941 B946 B942 B943 B944 B945 B947 B948 B949 B950 B951 B952 B953 B954 B955 B961 B956 B957 B958 B959 B960 B962 B963 B964 B965 B966 B967 B968 B969 B970 B971 B972 B973 B974 B975 B976 B977 B978 B979 B980 B981 B982 B983 B984 B985 B986 B987 B988 B989 B990 B991 B992 B993 B994 B995 B996 B997 B998 B999 B1000 B1001 B1002 B1003 B1004 B1005 B1006 B1007 B1008 B1009 B1010 B1011 B1012 B1013 B1014 B1015 B1016 B1017 B1018 B1019 B1020 B1021 B1022 B1023 B1024 B1025 B1026 B1027 B1028 B1029 B1030 B1031 B1032 B1033 B1034 B1035 B1036 B1037 B1038 B1039 B1040 B1041 B1042 B1043 B1044 B1045 B1046 B1047 B1048 B1049 B1050 B1051 B1052 B1053 B1054 B1055 B1056 B1057 B1058 B1059 B1060 B1061 B1062 B1063 B1064 B1065 B1066 B1067 B1068 B1069 B1070 B1071 B1072 B1073 B1074 B1075 B1076 B1077 B1078 B1079 B1080 B1081 B1082 B1083 B1084 B1085 B1086 B1087 B1088 B1089 B1090 B1091 B1092 B1093 B1094 B1095 B1096 B1097 B1098 B1099 B1100 B1101 B1102 B1103 B1104 B1105 B1106 B1107 B1108 B1109 B1110 B1111 B1112 B1113 B1114 B1115 B1116 B1117 B1118 B1119 B1120 B1121 B1122 B1123 B1124 B1125 B1126 B1127 B1128 B1129 B1130 B1131 B1132 B1133 B1134 B1135 B1136 B1137 B1138 B1139 B1140 B1141 B1142 B1143 B1144 B1145 B1146 B1147 B1148 B1149 B1150 B1151 B1152 B1153 B1154 B1155 B1156

 \mathbf{Q}_1 Q_1 Q_1 $\mathbf{Q_1}$ <u>Q</u>₁ Q_1 \mathbf{Q}_1 \mathbf{Q}_1 \mathbf{Q}_1 Q_1 Q_1 Q_1 B1157 B1158 B1159 B1160 B1161 B1162 B1163 B1164 B1165 B1166 B1167 B1168 B1169 B1170 B1171 B1172 B1173 B1174 B1175 B1176 B1177 B1178 B1179 B1180 B1181 B1182 B1183 B1184 B1185 B1186 B1187 B1188 B1189 B1190 B1191 B1192 B1193 B1194 B1195 B1196 B1197 B1198 B1199 B1200 B1201 B1202 B1203 B1204 B1205 B1206 B1207 B1208 B1209 B1210 B1211 B1212 B1213 B1214 B1215 B1216 B1217

Table 18: Compounds of the formula lo (p is 0 or 1):

$$CF_3$$
 N
 CH_3
 CH_3
 CH_3
 CH_3

 \mathbf{Q}_2 Q_2 Q_2 <u>Q</u>2 \mathbf{Q}_{2} Q_2 \mathbf{Q}_2 \mathbf{Q}_2 \mathbf{Q}_2 \mathbf{Q}_2 \mathbf{Q}_{2} \mathbf{Q}_{2} C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18 C19 C20 C21 C22 C23 C24 C25 C26 C27 C28 C29 C30 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41 C42 C43 C44 C45 C46 C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 C59 C60 C61 C62 C63 C64 C65 C66 C67 C68 C69 C70 C71 C72 C73 C74 C75 C76 C77 C78 C79 C80 C81 C82 C83 C84 C85 C86 C87 C88 C89 C90 C91 C92 C93 C94 C95 C96 C97 C98 C99 C100 C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121 C122 C123 C124 C125 C126 C127 C128 C129 C130 C131 C132 C133 C134 C135 C136 C137 C138 C139 C140 C141 C142 C143 C144 C145 C146 C147 C148 C149 C150 C151

Table 19: Compounds of the formula Iq (p is 0 or 1):

$$CF_3 \xrightarrow[O]{Q_2} CH_2OCH_3$$
 (Iq)

 Q_2 Q_2 Q_2 Q_2 \mathbf{Q}_2 Q_2 Q_2 Q_2 \mathbf{Q}_{2} \mathbf{Q}_2 \mathbf{Q}_2 \mathbf{Q}_2 C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18 C19 C20 C21 C22 C23 C24 C25 C26 C27 C28 C29 C30 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41 C42 C43 C44 C45 C46 C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 C59 C60 C61 C62 C63 C64 C65 C66 C67 C68 C69 C70 C71 C72 C73 C74 C75 C76 C77 C78 C79 C80 C81 C82 C83 C84 C85 C86 C87 **C88** C89 C90 C91 C92 C93 C94 C95 C96 C97 C98 C99 C100 C101 C102 C103 C104 C105 C106 C107 C108 C109 C110 C111 C112 C113 C114 C115 C116 C117 C118 C119 C120 C121 C122 C123 C124 C125 C126 C127 C128 C129 C130 C131 C132 C133 C134 C135 C136 C137 C138 C139 C140 C141 C142 C143 C144 C145 C146 C147 C148 C149 C150 C151

Table 20: Compounds of the formula Ir (p is 0 or 1):

 Q_3 Q_3 \mathbf{Q}_3 Q_3 \mathbf{Q}_3 \mathbf{Q}_3 Q_3 \mathbf{Q}_3 \mathbf{Q}_3 \mathbf{Q}_3 Q_3 Q_3 D1 D2 D3 D4 D5 D6 **D7** D8 D9 D10 D11 D12 D13 D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24 D25 D26 D27 D28 D29 D30 D31 D32 D33 D34 D35 **D36** D37 D38 D39 D40 D41 D42 D43 D44 D45 D46 D47 **D48**

 \mathbf{Q}_3 Q_3 Q_3 \mathbf{Q}_3 \mathbf{Q}_3 Q_3 Q_3 \mathbf{Q}_3 Q_3 Q_3 \mathbf{Q}_3 Q_3 D49 D50 D51 D52 D53 D54 D55 D56 D57 D58 D59 D60 D62 D63 D64 D65 D66 D67 D68 D69 D70 D71 D72 D74 D75 D76 D77 D78 D79 D73 D80 D81 D82 D83 **D84** D85 D86 D87 D88 D89 D90 D91 D92 D93 D94 D95 D96 D98 D99 D100 D101 D102 D103 D104 D105 D106 D107 D108 D97 D109 D110 D111 D112 D113 D114 D115 D116 D117 D118 D119 D120 D121 D122 D123 D124 D125 D126 D127 D128 D129 D130 D131 D132 D133 D134 D135 D136 D137 D138 D139 D140

Table 21: Compounds of the formula Is (p is 0 or 1):

 \mathbf{Q}_3 \mathbf{Q}_3 \mathbf{Q}_3 Q_3 Q_3 Q_3 Q_3 <u>Q</u>3 Q_3 <u>Q₃</u> Q_3 Q_3 D1 D2 D3 D4 D5 D6 D7 D8 D10 D9 D11 D12 D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24 D25 D26 D27 D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D45 D46 D47 D48 D49 D50 D51 D52 D53 D54 D55 D56 D58 D59 D57 D60 D61 D62 D63 D64 D65 D66 D67 D68 D69 D70 D71 D72 D73 D74 D75 D76 D77 D78 D79 D80 D81 D82 D83 D84 D85 D86 D87 D88 D89 D90 D91 D92 D93 D94 D95 D96 D97 D98 D99 D100 D101 D102 D103 D104 D105 D106 D107 D108 D109 D110 D111 D112 D113 D114 D115 D116 D117 D118 D119 D120 D121 D122 D123 D124 D125 D126 D127 D128 D129 D130 D131 D132 D133 D134 D135 D136 D137 D138 D139 D140

Table 22: Compounds of the formula It (p is 0 or 1):

$$CF_3$$
 O
 CH_3
 O
 CH_3
 O

 Q4
 <

Table 23: Compounds of the formula lu (p is 0 or 1):

$$CF_3 \xrightarrow[O]{Q_4} CH_2OCH_3 (Iu)$$

 Q4
 Q4<

Table 24: Compounds of the formula ly (p is 0 or 1):

$$CF_3 \xrightarrow[O)p O Q_5$$
 (IV)

Table 25: Compounds of the formula lw (p is 0 or 1):

<u>Table 26: Physical data of the intermediates:</u>
Melting points are indicated in °C

Compound	Phys. dat.	Compound	Phys. dat.
A17	99-100	A1025	crystalline
			<u>-</u>
A7	105-106	A1206	94-95
A9	73-74	A1022	oil
A6	148-150	A1203	crystalline
A26	143-144	A21	amorphous
A34	170-171	A1023	110-111
A1026	crystalline	A1085	188-191
A1304	crystalline	A1088	157-158
A1301	crystalline	A1092	crystalline
A1018	110-111	A1095	136-138
A1	195-197	A1096	194-196
A2	150-151	A124	135-136
A15	164-166	A31	209-210
A27	107-108	H-B1057	166-167
A29	173-174	H-B1058	crystalline
A32	145-146	H-B1061	crystalline
A30	178-181	H-B1063	crystalline
A4	143-144	H-B1065	oil
A3	148-149	H-B1066	150-152
A10	166-167	H-B1067	122-123
A8	123-124	H-B1069	117-118

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Compound	Phys. dat.	Compound	Phys. dat.
A5	81-82	H-B1070	crystalline
A154	108-110	H-C1	116-118
A64	134-135	H-C24	172-175
A94	134-135	A1205	crystalline
A531	crystalline	H-D113	oil
A1045	crystalline	H-F5	oil
A1322	crystalline	H-E16	145-148
A184	146-147	A1088	157-158
A358	155-156	A1103	152-153

<u>Table 27: Physical data for the compounds of the formula I indicated in the above tables:</u> (The melting points are indicated in °C)

Comp. No.	m.p.	Phys. state	Comp. No.	m.p.	Phys. state
A2-B1	90-92	crystalline	A34-B1	53-54	crystalline
A2-B1082	-	resin	A9-B1	-	oil
A2-B1083	-	resin	A184-B1	98-99	crystalline
A2-B90	-	resin	A184-B24	101-102	crystalline
A2-B68	120-121	crystalline	A7-B24	-	oil
A2-B24	75-76	crystalline	A3-B24	-	oil
A7-B1	-	oil	A34-B24	51-52	crystalline
A2-B73	-	resin	A2-B1091	-	oil
A2-B75	-	amorphous	A2-B1092	-	oil
A2-B95	106-107	crystalline	A8-B24	52-53	crystalline
A2-B93	95-96	crystalline	A18-B24	-	oil
A8-B1	97-98	crystalline	A2-B552	-	resin
A2-B925	-	oil	A2-C152	-	oil
A3-B1	42-44	crystalline	A2-B69	-	resin
A94-B1	57-58	crystalline	A2-D36	-	resin
A2-B1057	-	amorphous	A2-B618	-	resin
A2-B1063	-	oil	A2-B49	-	resin
A2-B1061	-	oil	A2-D71	-	resin
A2-B133	58-60	crystalline	A2-B1093	-	resin

Comp. No.	m.p.	Phys. state	Comp. No.	m.p.	Phys. state
A2-B1058	89-91	crystalline	A2-B26	, _	oil
A64-B24	80-82	crystalline	A2-B33	-	resin
A64-B1	49-51	crystalline	A2-B34	-	waxy
A2-B1089	-	oil	A2-B35	-	waxy
A2-B31	151-153	crystalline	A2-B1087	**	viscous
A2-B1090	139-140	crystalline	A2-B1094	-	viscous
A154-B1	94-95	crystalline	A2-B1088	108-109	crystalline
A2-B46(cis)	61-62	crystalline	A531-B24	_	viscous
A2-B46(trans)	83-84	crystalline	A2-B1099	94-96	crystalline
A2-B91	-	resin	A2-B1095	-	viscous
A2-B2	-	resin	A2-B1097	-	oil
A2-B29	87-88	crystalline	A2-B1098	92-93	crystalline
A2-B1066	-	viscous	A2-C147	-	resin
A2-B25	-	oil	A2-B70	-	resin
A2-B1067	-	resin	A2-B49	-	resin
A2-B1069	-	oil	A2-C1	-	oil
A2-B1068	-	viscous	A2-B1096	-	resin
A2-B1070	-	viscous	A2-B1085	176-177	crystalline
A2-B5	-	resin	A1022-B24	-	oil
A2-C149	-	resin	A2-C47	107-110	crystalline
A2-C146	-	oil	A2-B1100	128-130	crystalline
A2-B112	-	resin	A8-B2	70-71	crystalline
A2-D140	-	oil	A8-B1064	••	resin
A2-B354	139-140	crystalline	A2-B45	-	resin
A2-E16	-	solid	A2-B10	-	viscous
A6-B1	123-124	crystalline	A8-B133	68-69	crystalline
A6-B24	-	oil	A8-B1101	113-114	crystalline
A1322-B24	-	oil	A8-B1106	-	oil
A2-B1101	124-125	crystalline	A2-D111(trans)	-	oil
A2-B156	-	oil	A2-D111(cis)	-	resin
A2-B144	-	resin	A8-D111(trans)	-	oil
A2-B145	-	resin	A8-D109	62-62	amorphous
A2-B134	-	resin	A8-B35	-	oil

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Comp. No.	m.p.	Phys. state	Comp. No.	m.p.	Phys. state
A1210-B354	220	crystalline	A1023-B2	-	resin
A2-C2	t -	oil	A1023-B354	95-97	crystalline
A358-B1	-	oil	A15-B354	-	resin
A2-D36	-	resin	A8-B354	-	oil
A1208-B354	-	oil	A8-B1067	-	oil
A2-D113 (Isom. A)	~	oil	A8-C146	-	oil
A2-D113 (Isom. B)	-	oil	A8-C1	-	oil
A2-D114 (Isom. A)	159-160	crystalline	A94-B34	108-110	crystalline
A2-D115	-	amorphous	A94-B35	82-84	crystalline
A1025-B354	-	viscous	A1210-B354	-	amorphous
A2-B1102	124-125	crystalline	A2-B1105	119	crystalline
A2-B1104	165-167	crystalline	A1099-B1107	-	amorphous
A1210-B1	117-119	crystalline	A2-B1123	-	resin
A8-B34	-	oil	A8-B1123	-	resin
A8-B1103	-	oil	A2-B1138	-	resin
A8-B1063	90-92	crystalline	A124-B1	60-65	crystalline
A8-B29	-	oil	A1170-B1	106-107	crystalline
A2-C24	-	oil	A124-B34	-	oil
A8-B552	-	oil	A124-B35	-	oil
A8-B156	-	resin	A94-B2	53-57	crystalline
A1210-B1105	145-146	glassy-	A2-B1174	-	crystalline
		amorphous			
A1206-B354	-	amorphous	A2-B1213	133-134	crystalline
A8-B134	-	oil	A3-B1213	-	oil
A8-D36	-	oil	A4-B1213	-	oil
A8-B1213	71-72	crystalline	A2-B1214	-	resin
A8-F5	-	resin	A2-F5	-	resin
A1029-B1105	94.5-95	crystalline	A2-D109	-	oil

Biological examples

Example B1: Herbicidal action before emergence of the plants (pre-emergence action) Monocotyledonous and dicotyledonous test plants are sown in standard soil in plastic pots. Immediately after sowing, the test substances as aqueous suspensions (prepared with a 25% wettable powder (Example F3, b) in accordance with WO 97/34485) or as emulsions (prepared with a 25% emulsion concentrate (Example F1, c)) are sprayed on at a rate of 2 kg of a.i./ha or 250 g of a.i./ha (500 l of water/ha). The test plants are then grown in the greenhouse under optimal conditions. After a test period of 3 weeks, the experiment is evaluated with reference to a nine-step scale (1 = complete damage, 9 = no effect). Score figures of 1 to 4 (in particular 1 to 3) mean a good to very good herbicidal action.

Table B1a: pre-emergence action

Compound	g/ha	Cyperus	Ipomoea	Setaria	Sinapis	Solanum	Stellaria
A2-B1	2000	2	2	1	2	2	1
A2-B1082	2000	2	2	2	2	1	2
A2-B1083	2000	2	3	3	4	2	3
A2-B90	2000	1	1	1	1	1	1
A2-B68	2000	1	2	1	2	1	2
A2-B24	2000	1	1	1	2	1	1
A2-B73	2000	3	4	2	2	2	2
A2-B75	2000	2	3	2	2	1	2
A2-B95	2000	2	4	2	2	1	2
A2-B93	2000	2	4	2	2	1	2
A3-B1	2000	2	2	4	2	3	2
A94-B1	2000	1	2	2	1	1	2
A2-B1063	2000	1	2	1	2	1	2
A2-B1061	2000	3	3	2	2	1	2
A2-B133	2000	1	2	2	2	1.	2
A64-B24	2000	4	4	2	2	1	2
A2-B1089	2000	1	2	2	2	1	2
A2-B31	2000	2	3	4	2	1	2
A2-B46 (cis)	2000	1	2	1	2	1	2

Compound	g/ha	Cyperus	Ipomoea	Setaria	Sinapis	Solanum	Stellaria
A2-B46 (trans)	2000	<u>, 1</u>	2	1	2	1	2
A2-B91	2000	1	2	1	2	1	2
A2-B2	2000	1	1	1	1	1	2
A2-B25	2000	2	3	2	2	1	2
A2-B1067	2000	2	3	2	2	3	3
A2-B1068	2000	2	2	2	2	1	2
A2-B1070	2000	2	3	3	2	2	2
A2-C146	2000	1	2	2	2	1	2
A2-B354	2000	1	1	1	1	1	2
A34-B1	2000	1	2	2	2	2	3
A9-B1	2000	2	1	2	1	1	2
A184-B1	2000	2	4	2	2	1	2
A184-B24	2000	1	3	2	2	1	2
A3-B24	2000	1	3	2	2	1	2
A8-B24	2000	1	2	2	2	1	3
A18-B24	2000	1	1	1	1	1	2
A2-B552	2000	1	2	2	2	1	2
A2-C152	2000	1	1	2	2	1	2
A2-B69	2000	1	4	2	2	1	1
A2-D36	2000	1	2	2	2	1	1
A2-B618	2000	1	1	1	2	1	1
A2-B33	2000	1	3	2	2	1	3
A2-B34	2000	1	3	2	2	1	2
A2-B35	2000	2	4	2	2	2	2
A2-B1095	2000	3	4	2	2	1	2
A2-C147	2000	2	4	2	2	2	2
A2-B49	2000	2	4	2	2	1	2
A2-C1	2000	2	3	1	2	1	2
A2-B1100	2000	1	3	1	2	1	2
A8-B2	2000	1	3	2	2	1	2
A8-B1064	2000	2	4	3	2	1	3
A8-B1101	2000	2	4	2	2	1	1
A2-B156	2000	1	2	1	2	1	2

Compound	g/ha	Cyperus	Ipomoea	Setaria	Sinapis	Solanum	Stellaria
A2-B144	2000	3	4	2	2	2	4
A2-B134	2000	1	2	1	2	1	1
A1210-B354	2000	2	3	2	1	1	2
A2-C2	2000	2	3	1	1	1	1
A2-D36	2000	1	2	- 1	2	3	1
A2-D113 (Isom.A)	2000	4	4	2	1	3	3
A2-D115	2000	3	3	2	2	2	3
A8-B34	2000	2	3	2	2	2	2
A8-B1103	2000	1	3	2	1	1	2
A2-C24	2000	1	2	1	1	1	2

Table B1b: Pre-emergence action:

Compound	g/ha	Panicum	Digitaria	Echino.	Abutilon	Amaranthus	Chenop.
A8-B1	250	2	2	2	1	1	1
A1022-B24	250	2	4	4	3	4	1
A2-B145	250	2	2	4	2	3	1
A1208-B354	250	1	1	1	1	1	1
A8-B1063	250	2	3	3	2	4	1
A8-B552	250	2	3	4	1	4	1
A8-B156	250	3	3	3	3	4	2
A1210-B1105	250	2	3	2	1	4	1

The same results are obtained when the compounds of the formula I are formulated in accordance with Examples F2 and F4 to F8 in accordance with WO 97/34485.

Example B2: Post-emergence herbicidal action

Monocotyledonous and dicotyledonous test plants are grown in the greenhouse in plastic pots containing standard soil, and, in the 4- to 6-leaf stage, sprayed with an aqueous suspension of the test substances of the formula I prepared with a 25% wettable powder (Example F3, b) in accordance with WO 97/34485) or with an emulsion of the test substances of the formula I prepared with a 25% emulsion concentrate (Example F1, c) in accordance with WO 97/34485), corresponding to a rate of 2 kg of a.i./ha or 250 g of a.i./ha

(500 I of water/ha). The test plants are subsequently grown on in the greenhouse under optimal conditions. After a test period of approximately 18 days, the test is evaluated with reference to a nine-step scale (1 = complete damage, 9 = no effect). Score figures of 1 to 4 (in particular 1 to 3) mean a good to very good herbicidal action. In this test, the compounds of the formula I show a potent herbicidal action.

Table B2a: Post-emergence action:

Compound	g/ha	Ipomoea	Lolium	Setaria	Sinapis	Solanum	Stellaria
A2-B1	2000	1	2	1	1	1	2
A2-B1082	2000	1	2	2	1	1	2
A2-B1083	2000	1	4	2	1	1	2
A2-B90	2000	1	2	2	1	2	2
A2-B68	2000	1	2	2	1	1	2
A2-B24	2000	1	2	2	1	2	2
A2-B73	2000	1	3	2	1	1	2
A2-B75	2000	2	2	3	1	2	2
A2-B95	2000	1	2	2	1	2	2
A2-B93	2000	1	2	2	1	2	2
A3-B1	2000	1	3	2	1	1	2
A94-B1	2000	1	2	2	1	1	1
A2-B1063	2000	2	2	4	1	2	2
A2-B1061	2000	2	2	2	1	2	2
A2-B133	2000	1	2	2	1	2	2
A2-B1058	2000	1	2	4	1	2	2
A64-B24	2000	2	2	4	1	2	2
A64-B1	2000	2	3	4	1	1	2
A2-B1089	2000	1	2	2	1	1	2
A2-B31	2000	2	2	2	1	2	2
A2-B1090	2000	2	4	4	2	2	2
A2-B46 (cis)	2000	1	2	3	1	2	2
A2-B46 (trans)	2000	1	2	2	1	1	2
A2-B91	2000	1	2	2	1	2	2
A2-B2	2000	1	2	2	1	2	2

Compound	g/ha	Ipomoea	Lolium	Setaria	Sinapis	Solanum	Stellaria
A2-B29	2000	2	3	2	1	2	2
A2-B1066	2000	1	3	2	1	2	2
A2-B25	2000	1	2	2	2	1	2
A2-B1068	2000	1	2	4	1	1	2
A2-B1070	2000	2	4	2	2	2	2
A2-B5	2000	1	2	2	1	2	2
A2-C149	2000	1	3	2	1	2	2
A2-C146	2000	1	2	2	1	2	2
A2-B112	2000	2	3	2	1	2	2
A2-B354	2000	2	2	2	2	2	2
A2-E16	2000	2	3	2	2	2	2
A6-B24	2000	1	3	2	1	1	2
A34-B1	2000	1	2	2	1	1	2
A9-B1	2000	2	4	2	2	2	2
A184-B1	2000	1	3	2	1	2	2
A184-B24	2000	1	2	2	1	2	2
A7-B24	2000	1	2	2	1	2	2
A3-B24	2000	2	2	2	1	2	2
A34-B24	2000	1	2	2	1	2	2
A8-B24	2000	2	2	2	1	2	2
A18-B24	2000	1	2	2	1	2	2
A2-C152	2000	2	2	3	1	2	2 -
A2-B69	2000	1	2	2	1	2	2
A2-D36	2000	2	2	2	1	2	2
A2-B618	2000	2	2	2	1	2	2
A2-B49	2000	2	2	2	1	2	2
A2-B1093	2000	2	2	2	1	2	2
A2-B33	2000	2	4	2	1	2	2
A2-B34	2000	1	3	2	1	1.	2
A2-B35	2000	1	3	2	1	1	2
A2-B1087	2000	1	4	3	1	2	2
A531-B24	2000	2	2	2	1	2	2
A2-B1095	2000	1	2	4	1	2	2

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Compound	g/ha	Ipomoea	Lolium	Setaria	Sinapis	Solanum	Stellaria	
A2-C147	2000	1	2	2	1	2	2	
A2-B70	2000	3	4	3	1	2	2	
A2-B49	2000	2	2	2	1	2	2	
A2-C1	2000	3	2	2	1	2	2	
A2-B1100	2000	2	2	3	1	1	2	
A8-B2	2000	2	2	2	2	2	3	
A8-B1064	2000	2	4	2	1	1	2	
A8-B133	2000	2	4	2	1	2	2	
A8-B1101	2000	2	3	2	1	2	2	
A2-B1101	2000	2	2	2	1	1	3	
A2-B156	2000	1	2	2	1	2	2	
A2-B134	2000	2	2	1	1	1	2	
A1210-B354	2000	2	2	2	1	1	2	
A2-C2	2000	2	1	1	1	1	1	
A2-D36	2000	2	1	1	1	1	1	
A2-D113 (Isom. A)	2000	2	1	1	1	1	2	
A2-D113 (Isom. B)	2000	2	2	2	2	1	2	
A2-D114	2000	2	1	1	1	1	1	
A2-D115	2000	1	2	1	1	1	1	
A8-B34	2000	2	2	2	2	2	2	
A8-B1103	2000	1	4	1	1	1	1	
A2-C24	2000	1	1	1	1	1	1	

Table B2b: Post-emergence action:

Compound		Panicum	Digitaria	Echino.	Abutilon	Xanth.	lpopur.	Chenop.
	g/ha							
A8-B1	250	4	3	3	3	3	3	2
A2-B1091	250	4	4	2	3	4	3	3
A2-B1094	250	2	3	2	3	3	3	2
A2-B145	250	2	2	2	3	3	3	1
A1208-B354	250	3	4	2	1	2	2	2
A1210-B1	250	2	2	2	2	2	2	1
A8-B552	250	2	3	3	2	2	2	2
A8-B156	250	2	3	3	1	2	2	1
A1210-B1105	250	1	2	3	2	2	2	1
A8-B134	250	3	3	3	2	3	3	2
A8-D36	250	3	3	2	2	3	3	2
A2-D111 (cis)	250	2	2	4	2	1	2	2
A2-D111 (trans)	250	3	3	3	3	1	3	2
A8-D111	250	3	3	3	3	1	2	3
A8-D109	250	3	3	3	_ 3	1	2	3
A8-F5	250	4	3	4	3	3	3	3
A2-F5	250	3	3	3	3	3	4	3

The same results are obtained when the compounds of the formula I are formulated in accordance with Examples F2 and F4 to F8 in accordance with WO 97/34485.

WHAT IS CLAIMED IS:

1. A compound of the formula I

in which

p is 0 or 1;

R₅ is C₁-C₆haloalkyl;

 R_2 is hydrogen, C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, vinyl which is substituted by C₁-C₂alkoxycarbonyl or phenyl, or is C₂-C₆alkynyl, C₂-C₆haloalkynyl, ethynyl which is substituted by trimethylsilyl, hydroxyl, C1-C2alkoxy, C1-C2alkoxycarbonyl or phenyl, or is C_3 - C_6 allenyl, C_3 - C_6 cycloalkyl, C_3 - C_6 cycloalkyl which is substituted by halogen, or is C₁-C₆alkoxy, C₃-C₆alkenyloxy, C₃-C₆-alkynyloxy, C₁-C₆haloalkoxy, C₃-C₆haloalkenyloxy, $cyano-C_1-C_4\\alkoxy,\ C_1-C_4\\alkoxy,\ C_1-C_4\\alkoxy,$ C₁-C₄alkoxy, C₁-C₄alkylsulfonyl-C₁-C₄alkoxy, C₁-C₄alkoxy, C₁-C₄alkoxy, C₁-C₆alkylthio, C₁-C₆alkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆haloalkylthio, C_1 - C_6 haloalkylsulfonyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 alkoxycarbonyl-C₁-C₄alkylsulfinyl, C₁-C₄alkoxycarbonyl-C₁-C₄alkylsulfonyl, benzyl-S(O)_{n1}-, C₁-C₆alkylamino, C₂-C₆dialkylamino, C₁-C₆alkylaminosulfonyl, di-(C₁-C₆alkylamino)sulfonyl, benzyloxy, benzyl, phenyl, phenoxy, phenylthio, phenylsulfinyl or phenylsulfonyl, it being possible for the phenyl-containing groups, in turn, to be substituted by C₁-C₃alkyl, C_1 - C_3 haloalkyl, C_1 - C_3 alkoxy, C_1 - C_3 haloalkoxy, halogen, cyano or nitro or R_2 is $OS(O)_{n2}$ - R_{21} , N(R₂₃)-S(O)_{n3}-R₂₂, cyano, carbamoyl, C₁-C₄alkoxycarbonyl, formyl, halogen, thiocyanato, amino, hydroxy- C_1 - C_4 alkyl, C_1 - C_4 alkyl, C_1 - C_4 alkyl, C_1 - C_4 alkyl, C_1 - C_4 alkyl, cyano-C₁-C₄alkyl, C₁-C₆alkylcarbonyloxy-C₁-C₄alkyl, C₁-C₄alkoxycarbonyl-C₁-C₄alkyl, C₁-C₄alkoxycarbonyloxy-C₁-C₄alkyl, C₁-C₄thiocyanato-C₁-C₄alkyl, benzoyloxy-C₁-C₄alkyl, C₂-C₆oxiranyl, C₁-C₄alkylamino-C₁-C₄alkyl, di-(C₁-C₄-alkyl)amino-C₁-C₄alkyl, C_1 - C_{12} alkylthiocarbonyl- C_1 - C_4 alkyl or formyl- C_1 - C_4 alkyl, or R_2 is a five- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic or partially saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and

sulfur, the ring system being bonded to the pyridine ring via a C₁-C₄alkylene, -CH=CH-, -C≡C-, -CH₂O-, -CH₂N(C₁-C₄alkyl)-, -CH₂SO-, or -CH₂SO₂ group and it not being possible for each ring system to contain more than 2 oxygen atoms and more than 2 sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁-C₆alkyl, C₁-C₆haloalkyl, C₃-C₆alkenyl, C₃-C₆haloalkenyl, C₃-C₆haloalkynyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₃-C₆alkenyloxy, C₃-C₆haloalkenyl, C₃-C₆haloalkylthio, C₃-C₆alkoxyloxy, mercapto, C₁-C₆alkylthio, C₁-C₆alkoxylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C₃-C₆alkynylthio, C₃-C₆alkoxylkylthio, C₃-C₆alkoxylkylthio, C₃-C₆alkoxylkylthio, C₃-C₆alkoxylkylthio, C₃-C₆alkoxylkylthio, C₃-C₆alkoxylkylthio, C₁-C₆haloalkylsulfonyl, C₁-C₆haloalkylsulfonyl, C₁-C₆haloalkylsulfonyl, C₁-C₆haloalkylsulfonyl, C₁-C₆haloalkylsulfonyl, C₁-C₆haloalkylsulfonyl, di-(C₁-C₄alkyl)amino, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, and where substituents on the nitrogen in the heterocyclic ring are other than halogen;

 $R_3 \text{ is hydrogen, } C_1\text{-}C_6 \text{alkyl, } C_1\text{-}C_6 \text{haloalkyl, } C_2\text{-}C_6 \text{alkenyl, } C_2\text{-}C_6 \text{haloalkenyl, } C_2\text{-}C_6 \text{alkynyl, } C_2\text{-}C_6 \text{haloalkynyl, } C_3\text{-}C_6 \text{cycloalkyl, } C_1\text{-}C_6 \text{alkoxy, } C_1\text{-}C_6 \text{haloalkoxy, } C_1\text{-}C_6 \text{alkylsulfinyl, } C_1\text{-}C_6 \text{alkylsulfinyl, } C_1\text{-}C_6 \text{alkylsulfonyl, } C_1\text{-}C_6 \text{haloalkylsulfinyl, } C_1\text{-}C_6 \text{haloalkylsulfonyl, } C_1\text{-}C_6 \text{alkylamino, } C_2\text{-}C_6 \text{dialkylamino, } C_1\text{-}C_6 \text{alkylaminosulfonyl, } C_2\text{-}C_6 \text{dialkylaminosulfonyl, } \text{phenyl, } \text{phenylsulfinyl, } \text{phenylsulfonyl or phenoxy, } \text{it being possible for phenyl, } \text{in turn, to be substituted by } C_1\text{-}C_3 \text{alkyl, } C_1\text{-}C_3 \text{haloalkyl, } C_1\text{-}C_3 \text{haloalkoxy, } \text{halogen, cyano or nitro, or } R_3 \text{ is -}N(R_{23})\text{-}S(O)_n\text{-}R_{22}, \text{ cyano, } \text{halogen, amino, } C_1\text{-}C_4 \text{alkoxy-}C_1\text{-}C_4 \text{alkyl} \text{ or } C_1\text{-}C_4 \text{alkyl-}S(O)_n\text{-}C_1\text{-}C_4 \text{alkyl; } R_4 \text{ is hydrogen, } C_1\text{-}C_6 \text{alkyn, hydroxyl, } C_1\text{-}C_6 \text{alkoxy, } C_1\text{-}C_6 \text{alkoxy, } C_3\text{-}C_6 \text{alkenyloxy, } C_3\text{-}C_6 \text{alkynyloxy, } C_1\text{-}C_4 \text{alkylsulfonyloxy, } C_1\text{-}C_4 \text{alkylsulfonyloxy, } C_1\text{-}C_4 \text{alkylsulfonyloxy, } C_1\text{-}C_4 \text{alkylsulfonyl, } C_1\text{-}C_3 \text{alkyl, } C_1\text{-}C_3 \text{haloalkyl, } C_1\text{-}C_3 \text{alkyl, } C_1\text{-}C_3 \text{haloalkyl, } C_1\text{-}C_3 \text{alkoxy, } C_1\text{-}C_3 \text{haloalkyl, } C_1\text{-}C_3 \text{alkyl, } C_1\text{-}C_3 \text{alkyl, } C_1\text{-}C_3 \text{alkoyl, } C_1\text{-}C_3 \text{alkoxy, } C_1\text{-}C_3 \text{haloalkoxy, } \text{halogen, cyano or nitro;}$

or R_4 is a five to ten-membered monocyclic or R_3 -fused bicyclic ring system which can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, the ring system, unless fused, being bonded to the pyridine ring directly or via a C_1 - C_4 alkylene, -CH=CH-, -C≡C-, -CH₂O-, -CH₂N(C_1 - C_4 alkyl)-, -CH₂S-, -CH₂SO-, or -CH₂SO₂- group and it not being possible for the ring system to contain more than 2 oxygen

atoms and more than two sulfur atoms, and it being possible for the ring system itself to be

mono-, di- or trisubstituted by C_1 - C_6 alkyl, C_1 - C_6 haloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, C_2 - C_6 alkynyl, C_2 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkynyl, C_2 - C_6 haloalkynyloxy, C_1 - C_6 haloalkylthio, C_1 - C_6 haloalkylthio, C_3 - C_6 alkenylthio, C_3 - C_6 haloalkenylthio, C_3 - C_6 alkynylthio, C_1 - C_4 alkoxy- C_1 - C_2 alkylthio, C_1 - C_4 alkylcarbonyl- C_1 - C_2 alkylthio, C_1 - C_4 alkoxycarbonyl- C_1 - C_2 alkylthio, cyano- C_1 - C_4 alkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 haloalkylsulfinyl, aminosulfonyl, aminosulfonyl, C_1 - C_6 haloalkylsulfonyl, aminosulfonyl, C_1 - C_2 alkylaminosulfonyl, di- $(C_1$ - C_2 alkyl)aminosulfonyl, di- $(C_1$ - C_4 alkyl)amino, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C_1 - C_3 alkyl, C_1 - C_3 haloalkyl, C_1 - C_3 alkoxy, C_1 - C_3 haloalkoxy, halogen, cyano or nitro, and where substituents on the nitrogen in the heterocyclic ring are other than halogen;

 R_{21} is C_1 - C_4 alkyl or C_1 - C_4 haloalkyl;

R₂₂ is C₁-C₄alkyl, C₁-C₄haloalkyl or di-(C₁-C₄alkyl)amino;

 R_{23} , R_{24} , R_{25} independently of one another are hydrogen or C_1 - C_4 alkyl;

 n_1 , n_2 , n_3 and n_4 independently of one another are 0, 1 or 2; Q is Q_1

$$O = \begin{pmatrix} R_{10} & R_{6} \\ W & R_{7} \\ R_{9} & R_{8} \end{pmatrix}$$
 (Q₁)

in which

 $R_6,\,R_7,\,R_8$ and R_9 independently of one another are hydrogen, $C_1\text{-}C_6\text{alkyl},\,C_1\text{-}C_6\text{haloalkyl},\,C_2\text{-}C_6\text{alkenyl},\,C_2\text{-}C_6\text{alkynyl},\,C_1\text{-}C_6\text{alkoxycarbonyl},\,C_1\text{-}C_6\text{alkylcarbonyl},\,C_1\text{-}C_6\text{alkyl-S}(O)_{\text{n17}},\,C_1\text{-}C_6\text{alkyl-NHS}(O)_2,\,C_1\text{-}C_6\text{alkylamino},\,\text{di-}(C_1\text{-}C_6\text{alkyl})\text{amino},\,\text{hydroxyl},\,C_1\text{-}C_6\text{alkoxy},\,C_3\text{-}C_6\text{alkynyloxy},\,\text{hydroxy-}C_1\text{-}C_6\text{alkyl},\,C_1\text{-}C_4\text{alkylsulfonyloxy-}C_1\text{-}C_6\text{alkyl},\,\text{tosyloxy-}C_1\text{-}C_6\text{alkyl},\,C_1\text{-}C_6\text{alkyl},\,C_1\text{-}C_6\text{alkyl-S}(O)_{\text{n4}}\text{-}C_1\text{-}C_6\text{alkyl},\,\text{cyano-}C_1\text{-}C_6\text{alkyl},\,C_1\text{-}C_6$

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C_1-C_4haloalkyl-S(O)_2O, C_1-C_4alkyl-S(O)_2NH, C_1-C_4alkyl-S(O)_{n19}N(C_1-C_4alkyl)<sub>2</sub>, halogen, nitro, COOH or cyano;
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or adjacent R_6 and R_7 or R_8 and R_9 together are -(CH2)_m- , C(O)O(CH2)_n20^- or -S(O)_n21(CH2)_n22^-;

 n_5 , n_{17} , n_{18} , n_{19} and n_{21} independently of one another are 0, 1 or 2;

n₂₀ is 2 or 3;

n₂₂ is 2, 3 or 4;

m is 2, 3, 4, 5, or 6;

W is oxygen, $S(O)_{n6}$,- $CR_{11}R_{12}$, - $CR_{63}R_{64}CR_{65}R_{66}$, -C(O)- or - NR_{13} ;

 R_{63} , R_{64} , R_{65} and R_{66} independently of one another are hydrogen or C_1 - C_6 alkyl, or R_{65} together with R_7 or R_9 forms a direct bond;

n₆ is 0, 1 or 2;

R₁₁ is hydrogen, C₁-C₄alkyl, C₁-C₄haloalkyl, C₁-C₄alkoxy-C₁-C₄alkyl, C₁-C₄alkylthio-C₁-C₄alkyl, C₁-C₄alkylthio-C₃-C₆cycloalkyl, C₁-C₄alkycarbonyloxy-C₁-C₄alkyl, C₁-C₄alkyl, tosyloxy-C₁-C₄alkyl, di-(C₁-C₃alkoxyalkyl)methyl, di-(C₁-C₃alkoxyalkyl)methyl, (C₁-C₃alkoxyalkyl)-(C₁-C₃alkthioalkyl)methyl, C₃-C₅oxacycloalkyl, C₃-C₅thiacycloalkyl, C₃-C₄dioxacycloalkyl, C₃-C₄dithiacycloalkyl, C₃-C₄oxathiacycloalkyl, formyl, C₁-C₄alkoxycarbonyl, carbamoyl, C₁-C₄alkylaminocarbonyl, di-(C₁-C₄alkyl)aminocarbonyl, phenylaminocarbonyl, benzylaminocarbonyl or phenyl which, in turn, can be substituted by C₁-C₄alkyl, C₁-C₄haloalkyl, C₁-C₄alkoxy, C₁-C₄haloalkoxy, C₁-C₄alkylcarbonyl,

 $C_1-C_4\\alkylamino,\ C_1-C_4\\alkylamino,\ di-C_1-C_4\\alkylamino,\ C_1-C_4\\alkyl-S(O)_{n21},$

 $C_1-C_4\\alkyl-S(O)_2O,\ C_1-C_4\\haloalkyl-S(O)_{n7},\ C_1-C_4\\haloalkyl-S(O)_2O,\ C_1-C_4\\alkyl-S(O)_2\\NH,\ C_1-C_4\\haloalkyl-S(O)_2\\NH,\ C_1-C_4\\haloalky$

C₁-C₄alkyl-S(O)_{n20}N(C₁-C₄alkyl), halogen, nitro, COOH or cyano;

 n_7 , n_{20} and n_{21} independently of one another are 0, 1 or 2;

or R₁₂ together with R₆ or R₉ is a group -(CH₂)₀-;

o is 1, 2, 3, 4 or 5;

R₁₂ is hydrogen, C₁-C₄alkyl or C₁-C₄haloalkyl;

or R_{12} together with R_{11} is a group -(CH₂)_{m1};

m₁ is 2, 3, 4, 5, or 6;

 $R_{10} \text{ is hydroxyl, } O^{\text{-}}M^{\text{+}}, \text{ halogen, cyano, SCN, OCN, } C_{1}\text{-}C_{12}\text{alkoxy, } C_{1}\text{-}C_{4}\text{alkoxycarbonyl-} \\ C_{1}\text{-}C_{4}\text{alkoxy, } C_{1}\text{-}C_{12}\text{alkylthio, } C_{1}\text{-}C_{12}\text{alkylsulfinyl, } C_{1}\text{-}C_{12}\text{alkylsulfonyl, } C_{1}\text{-}C_{12}\text{haloalkylthio, } \\ C_{1}\text{-}C_{12}\text{haloalkylsulfinyl, } C_{1}\text{-}C_{12}\text{haloalkylsulfonyl, } C_{1}\text{-}C_{6}\text{alkoxy-}C_{1}\text{-}C_{6}\text{alkylsulfinyl, } \\ C_{1}\text{-}C_{6}\text{alkylsulfinyl, } C_{1}\text{-}C_{6}\text{alkoxy-}C_{1}\text{-}C_{6}\text{alkylsulfonyl, } C_{2}\text{-}C_{12}\text{alkenylsulfinyl, } \\ C_{2}\text{-}C_{12}\text{alkenylsulfonyl, } C_{2}\text{-}C_{12}\text{alkynylthio, } C_{2}\text{-}C_{12}\text{alkynylsulfonyl, } \\ C_{2}\text{-}C_{12}\text{alkynylsulfonyl, C_{2}\text{-}C_{12}\text{alkynylsul$

C2-C12haloalkenylthio, C2-C12haloalkenylsulfinyl, C2-C12haloalkenylsulfonyl, C1-C4alkoxycarbonyl- C_1 - C_4 alkylthio, C_1 - C_4 alkoxycarbonyl- C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkoxycarbonyl- C_1 - C_4 alkylsulfonyl, $(C_1$ - C_4 alkoxy)₂P(O)O, C_1 - C_4 alkyl- $(C_1$ - C_4 alkoxy)P(O)O, $H(C_1-C_4alkoxy)P(O)O, R_{14}R_{15}N, R_{14}R_{15}NNH, R_{16}R_{17}NC(O)O-, R_{16}R_{17}NC(O)NH-, C_1-C_{12}alkyl-R_{15}NNH, R_{16}R_{17}NC(O)O-R_{16}R_{17}NC(O)NH-, C_1-C_{12}alkyl-R_{15}NNH$ $S(O)_2NR_{18}$, C_1-C_4 haloalkyi- $S(O)_2NR_{19}$, C_1-C_{12} alkyi- $S(O)_2O$, C_1-C_4 haloalkyi- $S(O)_2O$, C₁-C₁₈alkylcarbonyloxy, it being possible for the alkyl group to be substituted by halogen, C₁-C₆alkoxy, C₁-C₆alkylthio or cyano, or is C₂-C₁₈alkenylcarbonyloxy, C₂-C₁₈alkynylcarbonyloxy, C₃-C₆cycloalkylcarbonyloxy, C₁-C₁₂alkoxycarbonyloxy, C₁-C₁₂alkylthiocarbonyloxy, C₁-C₁₂alkylthiocarbamoyl, C₁-C₆alkyl-NH(CS)N(C₁-C₆alkyl)-NH-. di-C₁-C₆alkyl-N(CS)N(C₁-C₆alkyl)-NH-, benzyloxy, benzylthio, benzylsulfinyl, benzylsulfonyl, phenoxy, phenylthio, phenylsulfinyl, phenylsulfonyl, phenylsulfonylamino, phenylsulfonyloxy or benzoyloxy, it being possible for the phenyl groups, in turn, to be substituted by C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 haloalkoxy, C_1 - C_4 alkylcarbonyl, C₁-C₄alkoxycarbonyl, C₁-C₄alkylamino, di-C₁-C₄alkylamino, C₁-C₄alkylthio, C₁-C₄alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 alkyl- $S(O)_2O$, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl, C₁-C₄haloalkylsulfonyl, C₁-C₄haloalkyl-S(O)₂O, C₁-C₄alkyl-S(O)₂NH, C₁-C₄alkyl-S(O)₂N(C₁-C₄alkyl), halogen, nitro or cyano; or R₁₀ is a group Ar₁-thio, Ar₂-sulfinyl, Ar₃-sulfonyl, -OCO-Ar₄ or NH-Ar₅ in which Ar₁, Ar₂, Ar₃, Ar₄ and Ar₅ independently of one another are a five- to ten-membered monocyclic or fused bicyclic ring system which can be aromatic or partially saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, and it not being possible for each ring system to contain more than 2 oxygen atoms and more than two sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁-C₆alkyl, C₁-C₆haloalkyl, C₃-C₆alkenyl, C₃-C₆haloalkenyl, C₃-C₆alkynyl, C_3 - C_6 haloalkynyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 alkynyloxy, mercapto, C₁-C₆alkylthio, C₁-C₆haloalkylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C_3 - C_6 alkynylthio, C_2 - C_5 alkoxyalkylthio, C_3 - C_5 acetylalkylthio, C_3 - C_6 alkoxycarbonylalkylthio, C_2 - C_4 -cyanoalkylthio, C_1 - C_6 alkylsulfinyl, C_1 - C_6 haloalkylsulfinyl, C_1 - C_6 alkylsulfonyl, C_1 - C_6 haloalkylsulfonyl, aminosulfonyl, C₁-C₂alkylaminosulfonyl, di-(C₁-C₂alkyl)aminosulfonyl, di-(C₁-C₄alkyl)amino, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, and where substituents on the

R₁₄, R₁₅, R₁₆, R₁₇ and R₁₈ independently of one another are hydrogen or C₁-C₆alkyl;

nitrogen in the heterocyclic rings are other than halogen;

 n_8 , n_9 , n_{10} , n_{11} , n_{12} , n_{13} and n_{14} independently of one another are 0, 1 or 2; R_{13} is hydrogen, C_1 - C_4 alkyl, C_1 - C_4 alkythio- C_1 - C_4 carbonyl, C_1 - C_4 alkylsulfinyl- C_1 - C_4 carbonyl, C_1 - C_4 alkylsulfonyl- C_1 - C_4 carbonyl, C_1 - C_4 -alkoxycarbonyl, C_1 - C_4 alkylcarbonyl, phenylcarbonyl, or is phenyl which, in turn, can be substituted by C_1 - C_4 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylcarbonyl, C_1 - C_4 alkoxycarbonyl, C_1 - C_4 alkylamino, di- C_1 - C_4 -alkylamino, C_1 - C_4 alkyl- $S(O)_{n15}$, C_1 - C_4 alkyl- $S(O)_2$ O, C_1 - C_4 haloalkyl- $S(O)_{n16}$, C_1 - C_4 haloalkyl- $S(O)_2$ O, C_1 - C_4 alkyl- $S(O)_2$ NH, C_1 - C_4 alkyl- $S(O)_2$ N(C_1 - C_4 alkyl), halogen, nitro, or cyano; and n_{15} and n_{16} independently of one another are 0, 1 or 2; or an agrochemically tolerated salt M^+ or a stereoisomer or tautomer of a compound of the formula I.

2. A compound according to claim 1, wherein p is 0;

R₅ is C₁-C₆haloalkyl;

R₂ is hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, C₂-C₆alkenyl, C₂-C₆haloalkenyl, C₂-C₆alkynyl, C_2 - C_6 haloalkynyl, C_3 - C_6 cycloalkyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkoxy, C_1 - C_6 alkylthio, C_1 - C_6 alkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆haloalkylthio, C₁-C₆haloalkylsulfinyl, C₁-C₆haloalkylsulfonyl, benzyl-S(O)_{n1}-, C₁-C₆alkylamino, C₂-C₆dialkylamino, C₁-C₆alkylaminosulfonyl, C2-C6-dialkylaminosulfonyl, phenyl, phenoxy, phenylthio, phenylsulfinyl or phenylsulfonyl, it being possible for the phenyl group, in turn, to be substituted by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, or is $OS(O)_{n2}$ -R₂₁, $N(R_{23})$ - $S(O)_{n3}$ -R₂₂, cyano, halogen, amino, C_1 - C_4 alkoxy- C_1 - C_4 alkyl, C_1 - C_4 alkyl- $S(O)_{14}-C_1-C_4$ alkyl, cyano- C_1-C_4 alkyl or C_1-C_4 alkoxy- C_1-C_4 alkoxy; R₃ is hydrogen, C₁-C₆alkyl, C₁-C₆haloalkyl, C₂-C₆alkenyl, C₂-C₆haloalkenyl, C₂-C₆alkynyl, C₂-C₆haloalkynyl, C₃-C₆cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkoxy, C₁-C₆alkylthio, C₁-C₆alkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆haloalkylthio, C₁-C₆haloalkylsulfinyl, C₁-C₆haloalkylsulfonyl, C₁-C₆alkylamino, C₂-C₆dialkylamino, C₁-C₆-alkylaminosulfonyl, C₂-C₆dialkylaminosulfonyl, phenyl, phenylthio, phenylsulfinyl, phenylsulfonyl or phenoxy, it being possible for phenyl, in turn, to be substituted by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, or is -N(R₂₃)-S(O)n-R₂₂, cyano, halogen, amino, C_1 - C_4 alkyl- C_1 - C_4 alkyl or C_1 - C_4 alkyl- C_1 - C_4 alkyl; R₄ is hydrogen, C₁-C₆alkyl, C₁-C₄alkoxy, C₁-C₄haloalkoxy, C₁-C₄alkylcarbonyloxy, C₁-C₄-

Alkylthio, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 haloalkyl, formyl, cyano, halogen,

phenyl or phenoxy, it being possible for phenyl, in turn, to be substituted by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro; or R₄ is a five- to ten-membered monocyclic or R₃-fused bicyclic ring system which can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, the ring system being bonded to the pyridine ring via a C1-C4alkylene group and it not being possible for the ring system to contain more than 2 oxygen atoms and more than two sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁-C₆alkyl, C₁-C₆haloalkyl, C₂-C₆alkenyl, C₂-C₆haloalkenyl, C₂-C₆alkynyl, C₂-C₆haloalkynyl, C₁-C₆alkoxy, C₁-C₆haloalkoxy, C₃-C₆alkenyloxy, C₃-C₆alkynyloxy, C₁-C₆-Alkylthio, C₁-C₆haloalkylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C₃-C₆alkynylthio, C₁-C₄alkoxy-C₁-C₂alkylthio, C₁-C₄alkylcarbonyl-C₁-C₂alkylthio, C₁-C₄alkoxycarbonyl-C₁-C₂alkylthio, cyano-C₁-C₄alkylthio, C₁-C₆alkylsulfinyl, C₁-C₆haloalkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆haloalkylsulfonyl, aminosulfonyl, C₁-C₂alkylaminosulfonyl, C₂-C₄dialkylaminosulfonyl, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C₁-C₃alkyl, C₁-C₃haloalkyl, C₁-C₃alkoxy, C₁-C₃haloalkoxy, halogen, cyano or nitro, and where substituents on the nitrogen in the heterocyclic ring are other than halogen:

 R_{21} and R_{22} independently of one another are C_1 - C_4 alkyl or C_1 - C_4 haloalkyl; R_{23} , R_{24} and R_{25} independently of one another are hydrogen or C_1 - C_4 alkyl; n, n_1 , n_2 , n_3 and n_4 independently of one another are 0, 1 or 2; C_4 0 is C_4 1

in which

 R_6 , R_7 , R_8 and R_9 independently of one another are hydrogen, C_1 - C_6 alkyl, C_1 - C_6 -haloalkyl, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, C_1 - C_6 alkoxycarbonyl, C_1 - C_6 alkyl- $S(O)_{n17}$, C_1 - C_6 alkyl-NHS(O)₂, C_1 - C_6 alkylamino, di- $(C_1$ - C_6 alkyl)amino, hydroxyl, C_1 - C_6 alkoxy, C_3 - C_6 alkenyloxy, C_3 - C_6 -alkynyloxy, hydroxy- C_1 - C_6 alkyl, C_1 - C_4 alkylsulfonyloxy- C_1 - C_6 alkyl, tosyloxy- C_1 - C_6 alkyl, halogen, cyano, nitro, phenyl or phenyl which is substituted by C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkoxy, C_1 - C_4 alkylamino, C_1 - C_4 alkyl- $S(O)_{n18}$, C_1 - C_4 alkyl- $S(O)_2$ O, C_1 - C_4 haloalkyl- $S(O)_{n5}$,

 C_1 - C_4 haloalkyl- $S(O)_2O$, C_1 - C_4 alkyl- $S(O)_2NH$, C_1 - C_4 alkyl- $S(O)_{n19}N(C_1$ - C_4 alkyl), halogen, nitro, COOH or cyano;

or adjacent R₆ and R₇ or R₈ and R₉ together are -(CH₂)_m-;

 n_5 n_{17} , n_{18} and n_{19} independently of one another are 0, 1 or 2;

m is 2, 3, 4, 5, or 6;

W is oxygen, $S(O)_{n6}$, $-CR_{11}R_{12}$, -C(O)- or $-NR_{13}$ -;

n₆ is 0, 1 or 2;

 $R_{11} \text{ is hydrogen, } C_1\text{-}C_4\text{alkyl, } C_1\text{-}C_4\text{haloalkyl, } C_1\text{-}C_4\text{alkoxy-}C_1\text{-}C_4\text{alkyl, } C_1\text{-}C_4\text{alkylthio-}C_1\text{-}C_4\text{alkyl, } C_1\text{-}C_4\text{alkyl, } C_1\text{-}C_4\text{alkylsulfonyloxy-}C_1\text{-}C_4\text{alkyl, } \text{tosyloxy-}C_1\text{-}C_4\text{alkyl, } \text{di-}(C_1\text{-}C_3\text{alkoxyalkyl})\text{methyl, } \text{di-}(C_1\text{-}C_3\text{alkoxyalkyl})\text{methyl, } \text{di-}(C_1\text{-}C_3\text{alkoxyalkyl})\text{methyl, } C_3\text{-}C_5\text{oxacycloalkyl, } C_3\text{-}C_5\text{thiacycloalkyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_3\text{-}C_4\text{dioxacycloalkyl, } C_3\text{-}C_4\text{alkoxycarbonyl or phenyl which, in turn, } can be substituted by $C_1\text{-}C_4\text{alkyl, } C_1\text{-}C_4\text{haloalkyl, } C_1\text{-}C_4\text{alkoxy, } C_1\text{-}C_4\text{-}alkoxy, } C_1\text{-}C_4\text{-}alkylamino, } C_1\text{-}C_4\text{alkylamino, } C_1\text{-}C_4\text{alkylamino, } C_1\text{-}C_4\text{alkyl-}s(O)_2O, $C_1\text{-}C_4\text{haloalkyl-}s(O)_{n7}, $C_1\text{-}C_4\text{haloalkyl-}s(O)_2O, $C_1\text{-}C_4\text{alkyl-}s(O)_2O, $C_1\text{-}C_4\text{alkyl-}s(O)_{n20}N(C_1\text{-}C_4\text{alkyl), halogen, nitro, COOH or cyano;} }$

 n_7 , n_{20} and n_{21} independently of one another are 0, 1 or 2;

or R₁₂ together with R₉ is a group -(CH₂)_O-;

o is 1, 2, 3, 4 or 5;

R₁₂ is hydrogen, C₁-C₄alkyl or C₁-C₄haloalkyl;

or R₁₂ together with R₁₁ is a group -(CH₂)_{m1};

m₁ is 2, 3, 4, 5, or 6;

 $R_{10} \text{ is hydroxyl, O}^{\text{-}M}^{+}, \text{ halogen, } C_{1}\text{-}C_{12} \text{alkoxy, } C_{1}\text{-}C_{12} \text{alkylcarbonyloxy, } C_{2}\text{-}C_{4}\text{-} \\ \text{alkenylcarbonyloxy, } C_{3}\text{-}C_{6} \text{cycloalkylcarbonyloxy, } C_{1}\text{-}C_{12} \text{alkoxycarbonyloxy, } C_{1}\text{-}C_{12}\text{-} \\ \text{alkylcarbonyloxy, } R_{23}R_{24}N\text{-}C(O)O, C_{1}\text{-}C_{12} \text{alkylS}(O)_{n8}\text{-}, C_{1}\text{-}C_{4} \text{haloalkyl-S}(O)_{n9}\text{-}, C_{2}\text{-}C_{12}\text{-} \\ \text{alkenylS}(O)_{n10}\text{-}, C_{2}\text{-}C_{12} \text{haloalkenylS}(O)_{n11}\text{-}, C_{2}\text{-}C_{12} \text{alkynylS}(O)_{n12}\text{-}; \text{ benzyloxy, phenoxy, phenylthio, phenylsulfinyl or phenylsulfonyl, where the phenyl group, in turn, can be substituted by <math>C_{1}\text{-}C_{4} \text{alkyl, } C_{1}\text{-}C_{4} \text{haloalkyl, } C_{1}\text{-}C_{4} \text{alkoxy, } C_{1}\text{-}C_{4} \text{haloalkoxy, } C_{1}\text{-}C_{4} \text{alkylcarbonyl, } \\ C_{1}\text{-}C_{4} \text{alkoxycarbonyl, } C_{1}\text{-}C_{4} \text{alkylamino, di}\text{-}C_{1}\text{-}C_{4} \text{alkylamino, } C_{1}\text{-}C_{4} \text{alkyl-S}(O)_{n13}, C_{1}\text{-}C_{4} \text{alkyl-S}(O)_{2}O, C_{1}\text{-}C_{4} \text{alkyl-S}(O)_{2}NH, C_{1}\text{-}C_{4} \text{alkyl-S}(O)_{2}O, C_{1}\text{-}C_{4} \text{alkyl-S}(O)_{2}O, (C_{1}\text{-}C_{4} \text{alkyl-S}(O)_{2}O, (C_{1}\text{-}C_{4} \text{alkyl-S}(O)_{2}O, (C_{1}\text{-}C_{4} \text{alkyl-S}(O)_{2}O, (C_{1}\text{-}C_{4} \text{alkoxy})\text{-}C(O)_{2}O, (C_{1}\text{-}C_{4} \text{alkyl-S}(O)_{2}O, (C_{1}\text{-}C_{4} \text{alkyl-S}(O)_{2}O, (C_{1}\text{-}C_{4} \text{alkoxy})\text{-}C(O)_{2}O, (C_{1}\text{-}C_{4} \text{alkoxy})\text{-}C(O)_{2}O,$

 n_8 , n_9 , n_{10} , n_{11} , n_{12} , n_{13} and n_{14} independently of one another are 0, 1 or 2;

R₁₃ is hydrogen, C₁-C₄alkyl, C₁-C₄alkoxycarbonyl or phenyl which, in turn, can be substituted by C₁-C₄alkyl, C₁-C₄haloalkyl, C₁-C₄alkoxy, C₁-C₄haloalkoxy, C₁-C₄alkylcarbonyl, C₁-C₄alkoxycarbonyl, C₁-C₄alkylamino, di-C₁-C₄alkylamino, C₁-C₄alkyl-S(O)_{n15}, C₁-C₄alkyl-S(O)₂O, C₁-C₄alkyl-S(O)₂NH, C₁-C₄alkyl-S(O)₂NH, C₁-C₄alkyl-S(O)₂N(C₁-C₄alkyl), halogen, nitro or cyano;

 n_{15} and n_{16} independently of one another are 0, 1 or 2; or an agrochemically tolerated salt M^{+} or a stereoisomer or tautomer of a compound of the formula I.

- 3. A compound according to claim 1, in which R₁₀ is hydroxyl or O⁻M⁺.
- 4. A compound according to claim 1, in which W is oxygen, -CR₁₁R₁₂- or -C(O)-.
- 5. A compound according to claim 1, in which W is oxygen and R_6 , R_7 , R_8 and R_9 independently of one another are hydrogen or C_1 - C_3 alkyl.
- 6. A compound according to claim 1, in which W is -C(O)- and R_6 , R_7 , R_8 and R_9 independently of one another are C_1 - C_3 alkyl.
- 7. A compound according to claim 1, in which R₂ is hydrogen and R₃ is methyl.
- 8. A compound according to claim 1, in which R_2 is methyl, ethyl, n-propyl, i-propyl, vinyl, methoxymethyl, methoxycarbonyloxymethyl, ethoxycarbonyloxymethyl, acetoxymethyl, propionyloxymethyl, chloromethyl, bromomethyl, fluoromethyl, difluoromethyl, trifluoromethyl or cyanomethyl.
- 9. A compound according to claim 1, in which R₄ is hydrogen or methyl.
- 10. A compound according to claim 1, in which R_5 is trifluoromethyl, difluorochloromethyl, pentafluoroethyl, heptafluoropropyl or difluoromethyl.
- 11. A compound according to claim 1, in which R_3 is hydrogen and R_2 is C_1 - C_4 alkyl, C_1 - C_3 haloalkyl, cyclopropyl, C_2 - C_3 alkenyl, C_2 - C_3 haloalkenyl, C_2 - C_3 alkynyl, allenyl, C_1 - C_2 -alkoxy- C_1 - C_2 alkyl, C_1 - C_2 alkyl, cyano- C_1 - C_2 alkyl, C_1 - C_2 alkoxycarbonyl- C_1 - C_2 -alkyl, C_1 - C_2 - $C_$

alkyl, C_1 - C_4 alkylcarbonyloxy- C_1 - C_2 alkyl, C_1 - C_3 alkoxy, C_1 - C_3 haloalkoxy, allyloxy, propargyloxy, C_1 - C_3 alkylthio, C_1 - C_3 alkylsulfinyl or cyano.

12. A compound of the formula IIIa

in which

R₅₀₁ is C₁-C₆haloalkyl;

R₃₀₁ is hydrogen;

R₄₀₁ is hydrogen or C₁-C₆alkyl; and

R₂₀₁ is C₁-C₆alkyl, C₁-C₆haloalkyl-C₁-C₄alkyl, C₂-C₆alkenyl, C₂-C₆haloalkenyl, or C₁-C₂alkoxycarbonyl- or phenyl-substituted vinyl, C2-C6alkynyl or C2-C6haloalkynyl; or trimethylsilyl-, hydroxyl-, C₁-C₂alkoxy-, C₁-C₂alkoxycarbonyl- or phenyl-substituted ethynyl or C₃-C₆allenyl; or C₃-C₆cycloalkyl, halogen-substituted C₃-C₆cycloalkyl, C₁-C₄alkoxy-C₁-C₄alkyl, C₁-C₄alkyl-S(O)_{n4}-C₁-C₄alkyl, cyano-C₁-C₄alkyl, C₁-C₄alkoxycarbonyl-C₁-C₄alkyl, C₁-C₄thiocyanato, oxiranyl, C₁-C₄alkylamino-C₁-C₄alkyl, C₁-C₄dialkylamino-C₁-C₄alkyl, hydroxy-C₁-C₄alkyl, C₁-C₁₂alkylthiocarbonyl-C₁-C₄alkyl or formyl-C₁-C₄alkyl, or R₂₀₁ is a five- to tenmembered monocyclic or fused bicyclic ring system which can be aromatic or partially saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, the ring system being bonded to the pyridine ring via a C₁-C₄alkylene, -CH=CH-, -C≡C-, -CH₂O-, -CH₂N(C₁-C₄alkyl)-, -CH₂S-, -CH₂SO- or -CH₂SO₂group and it not being possible for each ring system to contain more than 2 oxygen atoms and more than two sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁-C₆alkyl, C₁-C₆haloalkyl, C₃-C₆alkenyl, C₃-C₆haloalkenyl, C₃-C₆alkynyl, C₃-C₆haloalkynyl, C₁-C₆alkoxy, C₁-C₆haloalkoxy, C₃-C₆alkenyloxy, C₃-C₆alkynyloxy, mercapto, C₁-C₆alkylthio, C₁-C₆haloalkylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C₃-C₆-alkynylthio, C₂-C₅alkoxyalkylthio, C₃-C₅acetylalkylthio, C₃-C₆alkoxycarbonylalkylthio, C₂-C₄-cyanoalkylthio, C₁-C₆alkylsulfinyl, C₁-C₆haloalkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆-haloalkylsulfonyl, aminosulfonyl, C₁-C₂alkylaminosulfonyl, di-(C₁-C₂alkyl)aminosulfonyl, di-(C₁-C₄alkyl)amino, halogen, cyano, nitro, phenyl and benzylthio, it being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C₁-

 C_3 alkyl, C_1 - C_3 haloalkyl, C_1 - C_3 alkoxy, C_1 - C_3 -haloalkoxy, halogen, cyano or nitro, and where the substituents on the nitrogen in the heterocyclic ring are other than halogen; and X is halogen or cyano.

13. A compound of the formula XVIa

in which

R₅₀₁ is C₁-C₆haloalkyl;

R₃₀₁ is hydrogen;

R₄₀₁ is hydrogen or C₁-C₆alkyl; and

 R_{201} is C_1 - C_6 alkyl, C_1 - C_6 haloalkyl- C_1 - C_4 alkyl, C_2 - C_6 alkenyl, C_2 - C_6 haloalkenyl, or C_1 - C_2 alkoxycarbonyl- or phenyl-substituted vinyl, C2-C6alkynyl or C2-C6haloalkynyl; or trimethylsilyl-, hydroxyl-, C₁-C₂alkoxy-, C₁-C₂alkoxycarbonyl- or phenyl-substituted ethynyl or C₃-C₆allenyl; or C₃-C₆cycloalkyl, halogen-substituted C₃-C₆cycloalkyl, C₁-C₄alkoxy-C₁-C₄alkyl, C_1 - C_4 alkyl- $S(O)_{n4}$ - C_1 - C_4 alkyl, cyano- C_1 - C_4 alkyl, C_1 - C_4 - C_4 Alkyl, C_1 - C_4 - C_4 Alkyl, C_1 - C_4 thiocyanato, oxiranyl, C₁-C₄alkylamino-C₁-C₄alkyl, C₁-C₄dialkylamino-C₁-C₄alkyl, hydroxy-C₁-C₄alkyl, C₁-C₁₂alkylthiocarbonyl-C₁-C₄alkyl or formyl-C₁-C₄alkyl, or R₂₀₁ is a five- to tenmembered monocyclic or fused bicyclic ring system which can be aromatic or partially saturated and can contain 1 to 4 hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, the ring system being bonded to the pyridine ring via a C1-C4alkylene, -CH=CH-, -C≡C-, -CH2O-, -CH2N(C1-C4alkyl)-, -CH2S-, -CH2SO- or -CH2SOgroup and it not being possible for each ring system to contain more than 2 oxygen atoms and more than two sulfur atoms, and it being possible for the ring system itself to be mono-, di- or trisubstituted by C₁-C₆alkyl, C₁-C₆haloalkyl, C₃-C₆alkenyl, C₃-C₆haloalkenyl, C₃-Cealkynyl, C3-Cehaloalkynyl, C1-Cealkoxy, C1-Cehaloalkoxy, C3-Cealkenyloxy, C3-C₆alkynyloxy, mercapto, C₁-C₆alkylthio, C₁-C₆haloalkylthio, C₃-C₆alkenylthio, C₃-C₆haloalkenylthio, C₃-C₆-alkynylthio, C₂-C₅alkoxyalkylthio, C₃-C₅acetylalkylthio, C₃-C₆alkoxycarbonylalkylthio, C₂-C₄-cyanoalkylthio, C₁-C₆alkylsulfinyl, C₁-C₆haloalkylsulfinyl, C₁-C₆alkylsulfonyl, C₁-C₆-haloalkylsulfonyl, aminosulfonyl, C₁-C₂alkylaminosulfonyl, di-(C₁-C₂alkyl)aminosulfonyl, di-(C₁-C₄alkyl)amino, halogen, cyano, nitro, phenyl and benzylthio, it

being possible for phenyl and benzylthio, in turn, to be substituted on the phenyl ring by C_1 - C_3 alkyl, C_1 - C_3 haloalkyl, C_1 - C_3 alkoxy, C_1 - C_3 -haloalkoxy, halogen, cyano or nitro, and where the substituents on the nitrogen in the heterocyclic ring are other than halogen; and X is halogen or cyano, with the proviso that, when R_{501} is trifluoromethyl and, simultaneously, R_{301} and R_{401} are hydrogen, then R_{201} is other than C_1 - C_6 alkyl.

- 14. Herbicidal and plant-growth-inhibitory composition, which has a herbicidally active content of a compound of the formula I on an inert carrier.
- 15. A method of controlling undesired vegetation, in which a herbicidally active amount of an active ingredient of the formula I or of a composition comprising this active ingredient is applied to the plants or their environment.
- 16. A method of inhibiting plant growth, in which a herbicidally active amount of an active ingredient of the formula I or of a composition comprising this active ingredient is applied to the plants or their environment.
- 17. The use of a composition according to claim 14 for controlling undesired plant growth.

INTERNATIONAL SEARCH REPORT

Interr nat Application No PCT/FP 99/10326

PCT/EP 99/10326 A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07D213/50 C07D405/06 C07D213/80 C07D213/70 A01N43/40 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 CO7D A01N Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ' Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y WO 96 26200 A (BASF AG ; DEYN WOLFGANG VON 1-17 (DE); HILL REGINA LUISE (DE); KARDORFF) 29 August 1996 (1996-08-29) the whole document Y WO 92 22203 A (DU PONT) 13 23 December 1992 (1992-12-23) see definitions of R1,R2 and R3 EP 0 245 230 A (MONSANTO CO) 1-17 11 November 1987 (1987-11-11) see definitions of Ra,R,R1 and X 13 -/--Further documents are listed in the continuation of box C. X X Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance Invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. "P" document published prior to the international fling date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 23 March 2000 30/03/2000 Name and mailing address of the ISA **Authorized officer** European Patent Office, P.B. 5818 Patentiaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3018 Scruton-Evans, I

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